



# User's Manual

OL8000RT3UTF

CyberPower Systems (USA), Inc.

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K01-0000195-02

## IMPORTANT SAFETY INSTRUCTIONS

This manual contains important instructions. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate the UPS.

**CAUTION!** The UPS must be connected to a grounded AC power outlet with fuse or circuit breaker protection. DO NOT plug the UPS into an outlet that is not grounded. If you need to power-drain this equipment, turn off and unplug the unit.

**CAUTION!** The battery can power hazardous components inside the unit, even when the AC input power is disconnected.

**CAUTION!** The UPS should be placed near the connected equipment and easily accessible.

**CAUTION!** To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range).

**CAUTION! (No User Serviceable Parts):** Risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

**CAUTION! (Non-Isolated Battery Supply):** Risk of electric shock, battery circuit is not isolated from AC power source; hazardous voltage may exist between battery terminals and ground. Test before touching.

**CAUTION!** To reduce the risk of fire, connect the UPS to a branch circuit with 40 amperes (OL6000) / 50 amperes (OL8000) / 60 amperes (OL10000) maximum over-current protection in accordance with the National Electric Code, ANSI/NFPA 70.

**CAUTION!** The AC outlet where the UPS is connected should be close to the unit and easily accessible.

**CAUTION!** Please use only UL-marked mains cable, (e.g. the mains cable of your equipment), to connect the UPS to the AC outlet.

**CAUTION!** Please use only UL-marked power cables to connect any equipment to the UPS.

**CAUTION!** When installing the equipment, ensure that the sum of the leakage current of the UPS and the connected equipment does not exceed 3.5mA.

**CAUTION!** The OL8000/OL10000 models are permanently-connected equipment and only qualified maintenance personnel may carry out installations.

**CAUTION!** Do not unplug the unit from AC Power during operation, as this will invalidate the protective ground insulation.

**CAUTION!** To avoid electric shock, turn off and unplug the unit before installing the input/output power cord with a ground wire. Connect the ground wire prior to connecting the line wires!

**CAUTION!** Do not use an improper size power cord as it may cause damage to your equipment and cause fire hazards.

**CAUTION!** Wiring must be done by qualified personnel.

**CAUTION! DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT!** Under no circumstances this unit should be used for medical applications involving life support equipment and/or patient care.

**CAUTION! DO NOT USE WITH OR NEAR AQUARIUMS!** To reduce the risk of fire, do not use with or near aquariums. Condensation from the aquarium can come in contact with metal electrical contacts and cause the machine to short out.

**CAUTION!** Do not dispose of batteries in fire as the battery may explode.

**CAUTION!** Do not open or mutilate the battery, released electrolyte is harmful to the skin and eyes.

**CAUTION!** A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed when working on batteries

1. Remove watches, rings or other metal objects.
2. Use tools with insulated handles.

**CAUTION!** The unit has a dangerous amount of voltage. When the UPS indicators is on, the units may continue to supply power thus the unit's outlets may have a dangerous amount of voltage even when it's not plugged in to the wall outlet.

**CAUTION!** Make sure everything is turned off and disconnected completely before conducting any maintenance, repairs or shipment.

**CAUTION!** Connect the Protection Earth (PE) safety conductor before any other cables are connected.

**WARNING! (Fuses):** To reduce the risk of fire, replace only with the same type and rating of fuse.

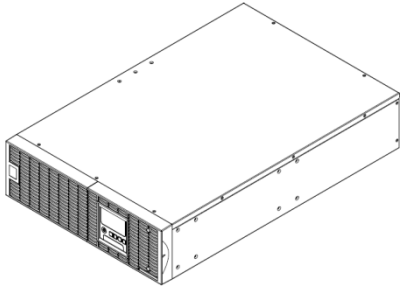
**DO NOT INSTALL THE UPS WHERE IT WOULD BE EXPOSED TO DIRECT SUNLIGHT OR NEAR A STRONG HEAT SOURCE!**

**DO NOT BLOCK OFF VENTILATION OPENINGS AROUND THE HOUSING!**

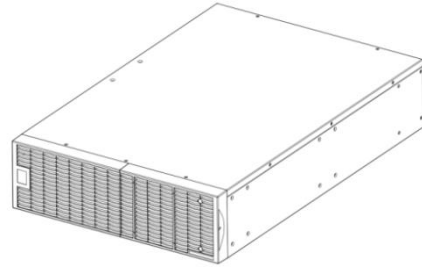
**DO NOT CONNECT DOMESTIC APPLIANCES SUCH AS HAIR DRYERS TO UPS OUTPUT SOCKETS!**

**SERVICING OF BATTERIES SHOULD BE PERFORMED OR SUPERVISED BY PERSONNEL KNOWLEDGE OF BATTERIES AND THE REQUIRED PRECAUTIONS. KEEP UNAUTHORIZED PERSONNEL AWAY FROM BATTERIES!**

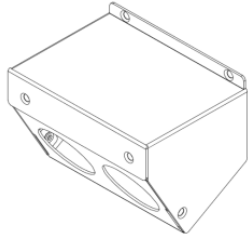
# UNPACKING



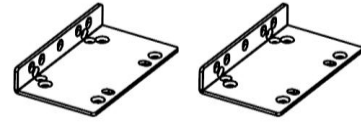
Power module



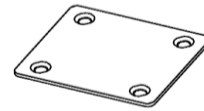
Battery module



Input / Output terminal block cover  
(Only for OL8000RT3U/OL10000RT3U)



Rackmount ears (Stands) (2) \* 2 sets



Tie plate (1) \* 1 set



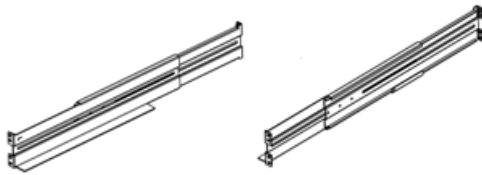
User's manual



Register card



Flat head screws: M5X8L (8) \* 2 sets

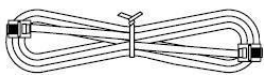


Rackmount left rail \* 2 sets

Rackmount right rail \* 2 sets



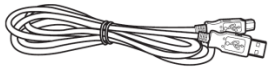
Pan head screws: M5X12L (12) \* 2 sets



Phone line



Plastic washers (8) \* 2 sets



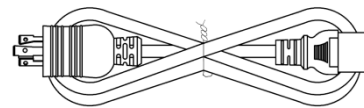
USB communication cable



Screw hole dust covers (10) \* 2 sets



Serial Interface Cable (RS-232)



Power cords



PowerPanel® Business Edition software CD

# HARDWARE INSTALLATION

## **HARDWARE INSTALLATION**

These versatile UPS systems can be mounted in a rackmount or vertical tower orientation. This versatility is especially important to growing organizations with changing needs that value having the option to position a UPS on a floor or in a rackmount system. Please follow the instructions below for the respective mounting methods.

## **SAFETY PRECAUTIONS**

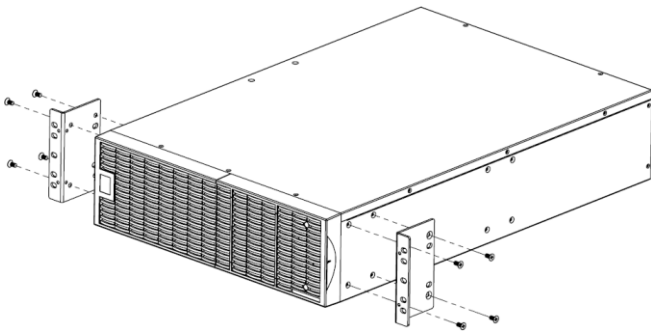
**CAUTION!** To prevent the risk of fire or electric shock, only use the supplied hardware to attach the mounting brackets.

## **RACKMOUNT INSTALLATION**

**Step 1: Remove the internal battery trays from the Battery module (See page 17)**

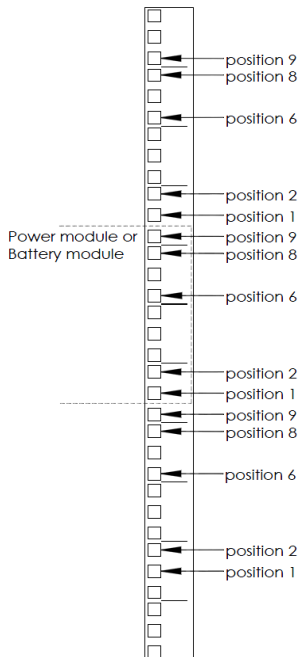
**Step 2: Rackmount ears installation**

Attach the two rackmount ears to the Battery module using the provided screws M5X8L\*8pcs.



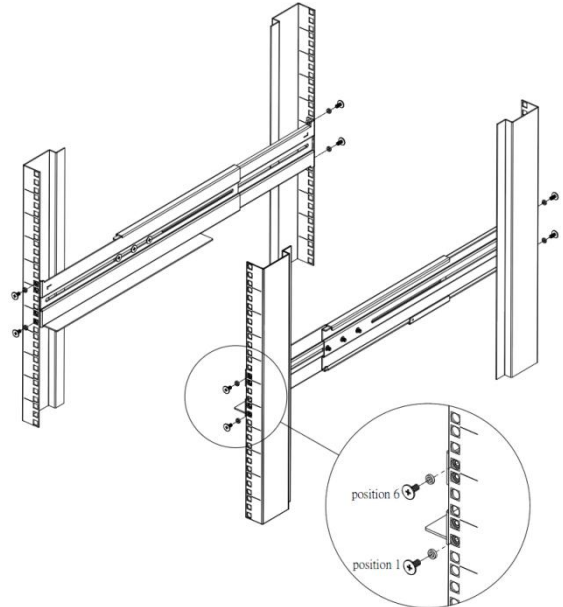
**Step 3: Rackmount rail Installation**

The rails adjust to mount in 48-cm (19-inch) panel racks from 52 to 91.5cm (20.5 to 36 inches) deep. Select the proper holes in the rack for positioning the Battery module in the rack. The Power module or the Battery module takes up position 1 through position 9.

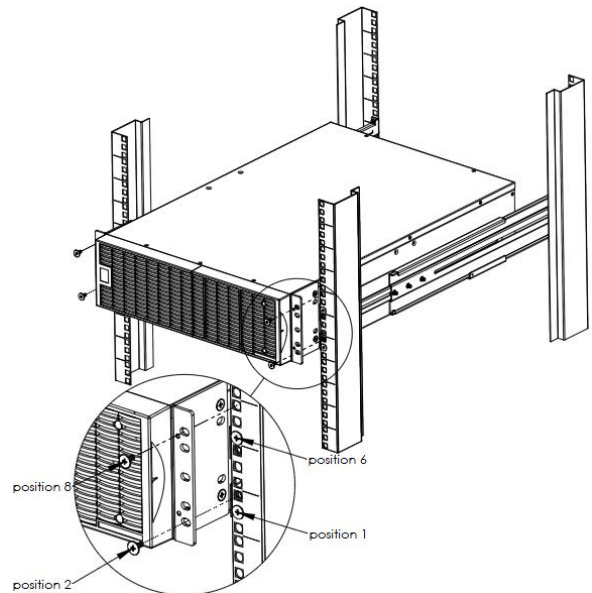


**Step 4: Adjust rackmount rails to fit your rack**

Attach the rackmount rail to your rack with two M5X12L screws and two plastic washers at the front of the rack. (Located in position 1 & position 6) Do not tighten the screws. Adjust the rail size on the rail assembly of your rack. Secure the rail to the rear of the rack with two M5X12L screws and two plastic washers. Tighten all screws at the front and rear of the rail. Once completed, perform the same steps for assembling the other rackmount rail.



Place the Battery module on a flat stable surface with the front of the unit facing toward you. Secure the Battery module to your rack with four M5X12L screws at the front of the rack. (Located in position 2 & position 8)



**Step 5: Place the internal battery trays back into the Battery module (See page 17)**

Once completed, perform the same steps for the Power module.

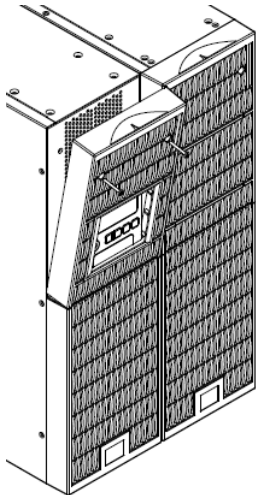
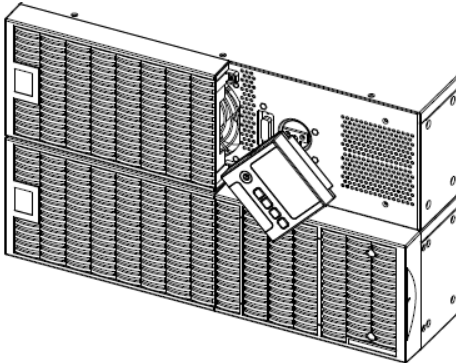
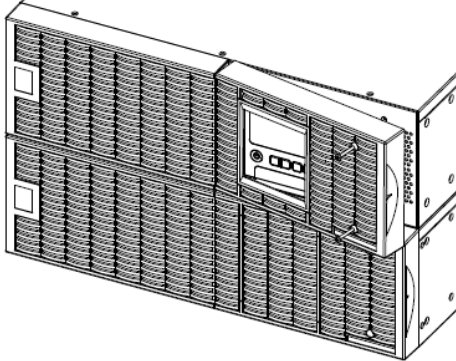
**CAUTION!** The Battery module must be installed below the Power module.

## HARDWARE INSTALLATION

### VERTICAL/TOWER INSTALLATION

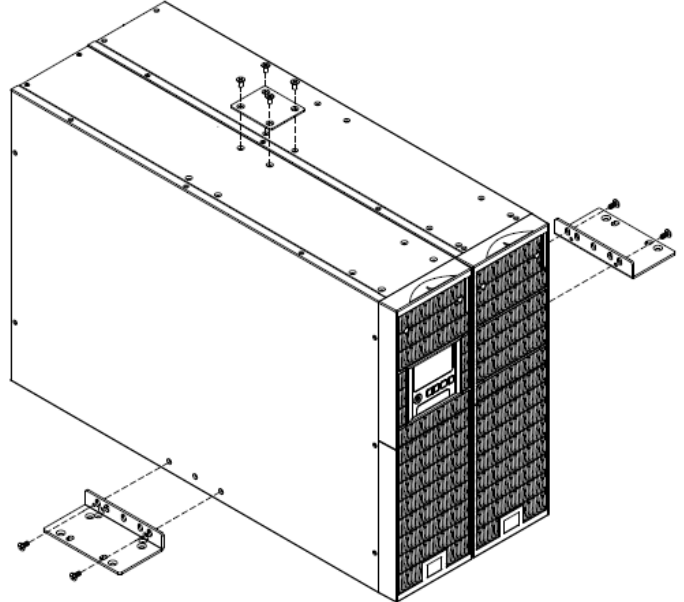
#### **Step 1: Rotate the Multifunction LCD Module**

Unscrew the right panel of the Power module. Separate the right panel from the UPS. Gently lift the LCD module out. Rotate it to the tower orientation. Reinstall it for a tower configuration.



#### **Step 2: Attach the base stands**

Secure the tie bracket with the screws (M5X8\*4pcs). Tighten the screws (M5X12\*4pcs) of the base stands (rackmount ears) onto the bottom of the power module and the battery module.



#### **Step 3: Attach dust covers**

Insert dust covers into the rackmount ear screw holes that are not being used.

### ELECTRICAL INSTALLATION

After completing the hardware installation of the UPS, you are now ready to plug in the UPS and connect your equipment.

### SAFETY PRECAUTIONS

**CAUTION!** Installation environment should be in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this UPS where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).

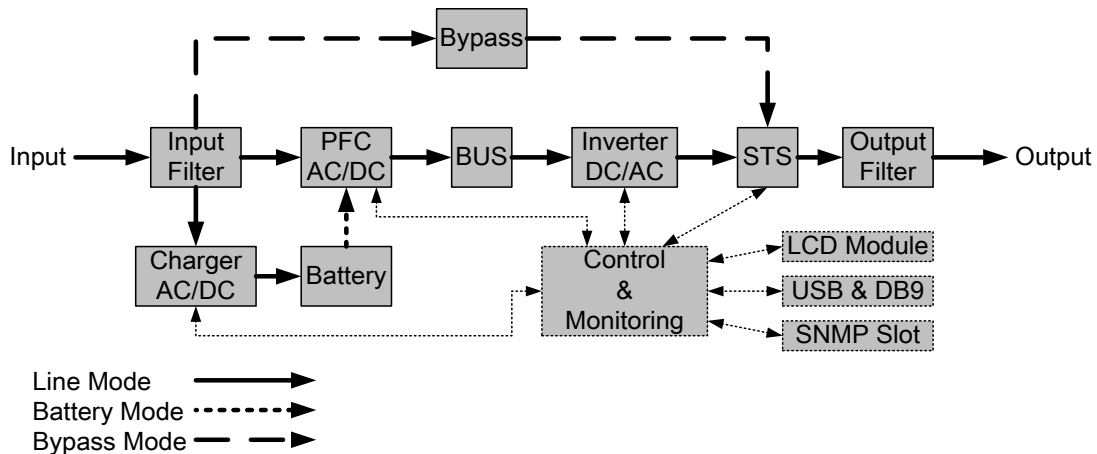
**CAUTION!** Never install a UPS, or associated wiring or equipment, during a lightning storm.

**CAUTION!** Do not work alone under hazardous conditions.

**CAUTION!** In case of the risk of electric shock, do not remove the top cover.

**CAUTION!** The battery can energize hazardous live parts inside even when the AC input power is disconnected.

## SYSTEM BLOCK DIAGRAM



## HARDWARE INSTALLATION GUIDE

- 1.** Battery charge loss may occur during shipping and storage. Before using the UPS, it's strongly recommended to charge batteries for four hours to ensure the batteries' maximum charge capacity. To recharge the batteries, simply plug the UPS into an AC outlet.
- 2.** When using the included software, connect either the serial or the USB cable between the computer and the corresponding port on the UPS. Note: If the USB port is used, the serial port will be disabled. They cannot be used simultaneously. After connecting to either the USB port or the Serial port on the UPS, a computer with the PowerPanel® Business Edition Agent software installed can control the operating schedule, battery test, outlets, as well as obtain UPS status information. However, other computers with PowerPanel® Business Edition Client software can only obtain UPS status information via LAN connection.
- 3.** Connect your computer, monitor, and any externally-powered data storage device (Hard drive, Tape drive, etc.) into the outlets only when the UPS is off and unplugged. DO NOT plug a laser printer, copier, space heater, vacuum, paper shredder or other large electrical device into the UPS. The power demands of these devices will overload and possibly damage the unit.
- 4.** To protect a fax machine, telephone, modem line or network cable, connect the telephone or network cable from the wall jack outlet to the jack marked "IN" on the UPS and connect a telephone cable or network cable from the jack marked "OUT" on the UPS to the modem, computer, telephone, fax machine, or network device.
- 5.** Press the ON/OFF switch to turn the UPS on. The Power-On indicator light will display when activated. If an overload is detected, an audible alarm will sound and the UPS will continuously emit two beeps per second. For resetting the unit, unplug some equipment from the outlets. Make sure your equipment carries a load current within the unit's safe range, (refer to the technical specifications).

- 6.** This UPS is equipped with an auto-charge feature. When the UPS is plugged into an AC outlet, the battery will automatically charge, even when the unit is switched off.
- 7.** To maintain an optimal battery charge, leave the UPS plugged into an AC outlet at all times.
- 8.** Before storing the UPS for an extended period of time, turn the unit OFF. Then cover it and store it with the batteries fully charged. Recharge the batteries every three months to ensure good battery capacity and long battery life. Maintaining a good battery charge will help prevent possible damage to the unit from battery leakage.
- 9.** The UPS has one USB port (default) and one Serial port that allows connection and communication between the UPS and any attached computer running the PowerPanel® Business Edition Agent software. The UPS can control the computer's shutdown during a power outage through the connection while the computer can monitor the UPS and alter various programmable parameters. Note: Only one communication port can be used at a time. The port not in use will automatically become disabled or the serial port will be disabled if both ports are attached.
- 10.** EPO (Emergency Power Off) Port:  
EPO ports allow administrators the capability to connect the UPS unit to customer-supplied EPO switches. These installations give operators a single access point to immediately power-off all equipment connected to the UPS during an emergency.
- 11.** To avoid electric shock, turn the unit OFF and disconnect the unit from utility power before hardwiring the UPS (in/out power cord). The in/out power cord MUST be grounded.

## HARDWIRING THE INPUT/ OUTPUT TERMINALS

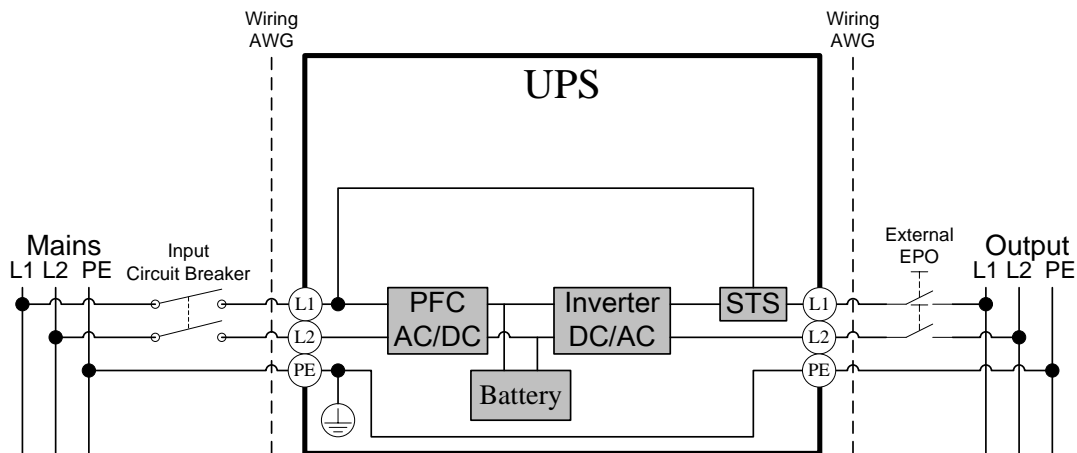
### CHECK CIRCUIT BREAKER/WIRING

Check branch circuit breaker rating and wiring dimensions with the following table.

UPS Capacity	Branch Circuit Breaker	Wiring AWG	Wiring mm <sup>2</sup>
6KVA	40A	10 AWG	5.5 mm <sup>2</sup>
8KVA	50A	8 AWG	8.0 mm <sup>2</sup>
10KVA	60A	6 AWG	14.0 mm <sup>2</sup>

### INPUT/ OUTPUT CONFIGURATION

Hardwire the input/output terminals as shown in the following diagram.



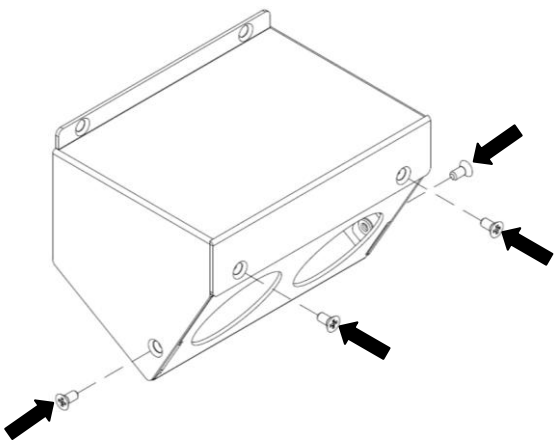
### SAFETY PRECAUTIONS

- CAUTION!** Input and Output circuit breakers must be "OFF" during the building installation.
- CAUTION!** An additional two pole disconnect device is necessary during the building installation.
- CAUTION!** Disconnected EPO will immediately shut down the logic circuit output of the UPS. Wiring the EPO signal is optional.
- CAUTION!** Local safety rules may require a separate, external EPO to turn off output circuit breakers. Refer to local wiring rules, the EPO should use approved components.

(Only for OL8000RT3U/OL10000RT3U)

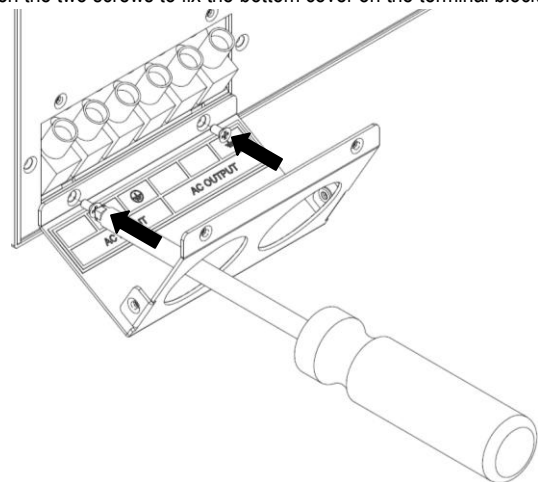
#### Step 1: Separate the top and bottom covers

Loosen the four screws to separate the top and bottom covers.



#### Step 2: Fix the bottom cover on the terminal block

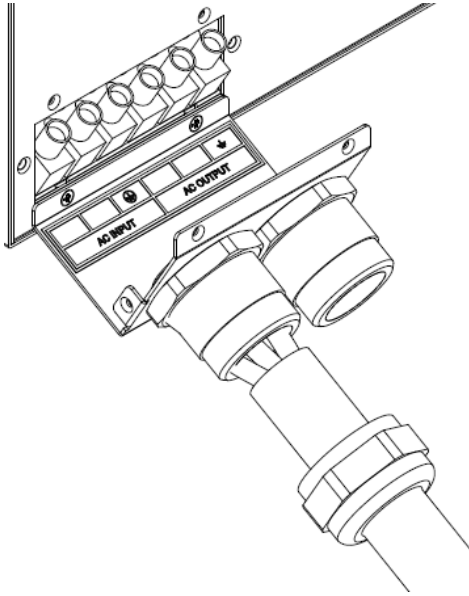
Tighten the two screws to fix the bottom cover on the terminal block.



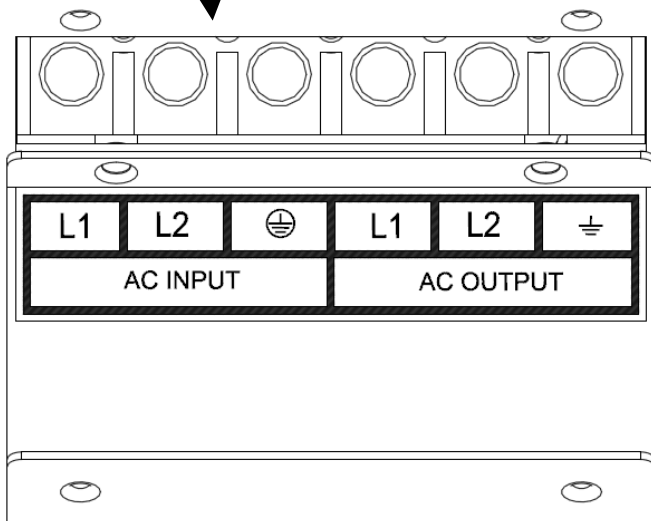
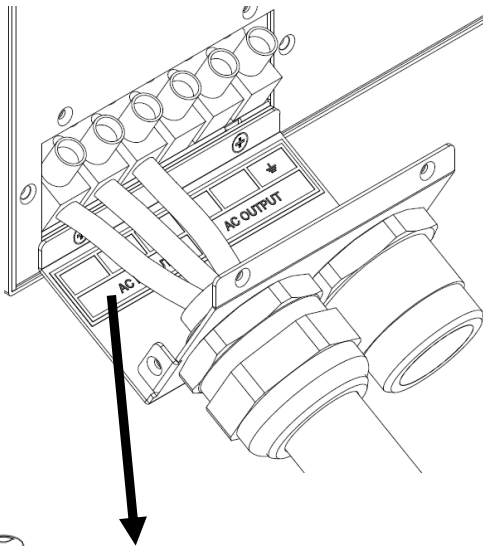
## HARDWIRING THE INPUT/ OUTPUT TERMINALS

### Step 3: Input configuration

Insert the input cable through the appropriate cable gland (not included).

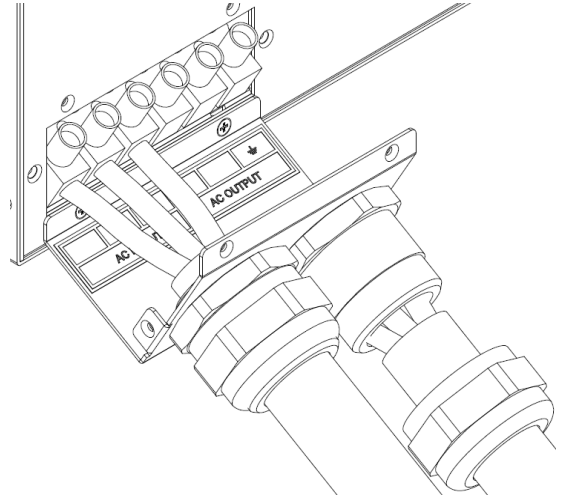


Connect the three wires to the input terminal block.

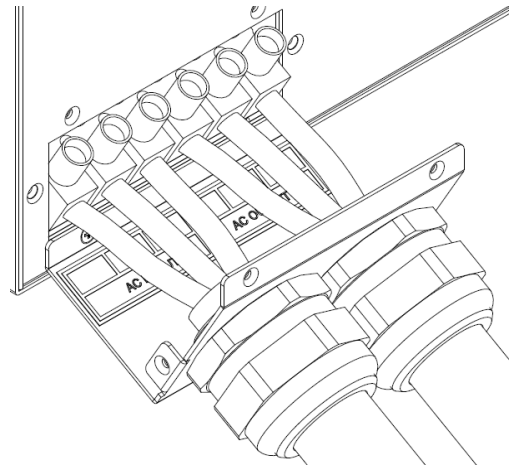


### Step 4: Output configuration

Insert the output cable through the appropriate cable gland (not included).

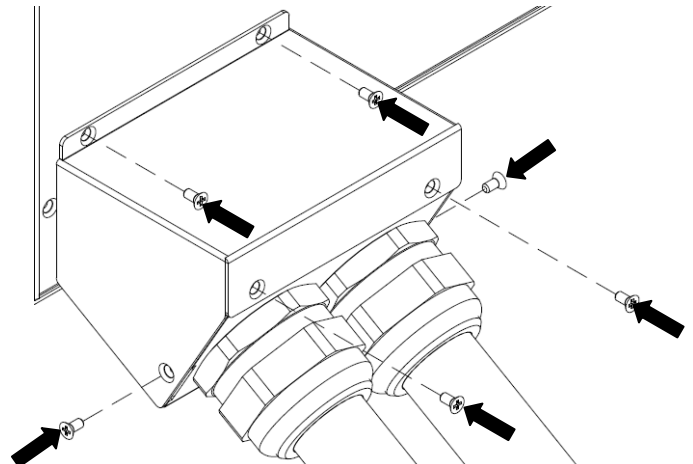


Connect the three wires to the output terminal block.



### Step 5: Fix the top cover on the bottom cover

Tighten the six screws to fix the top cover on the bottom cover.





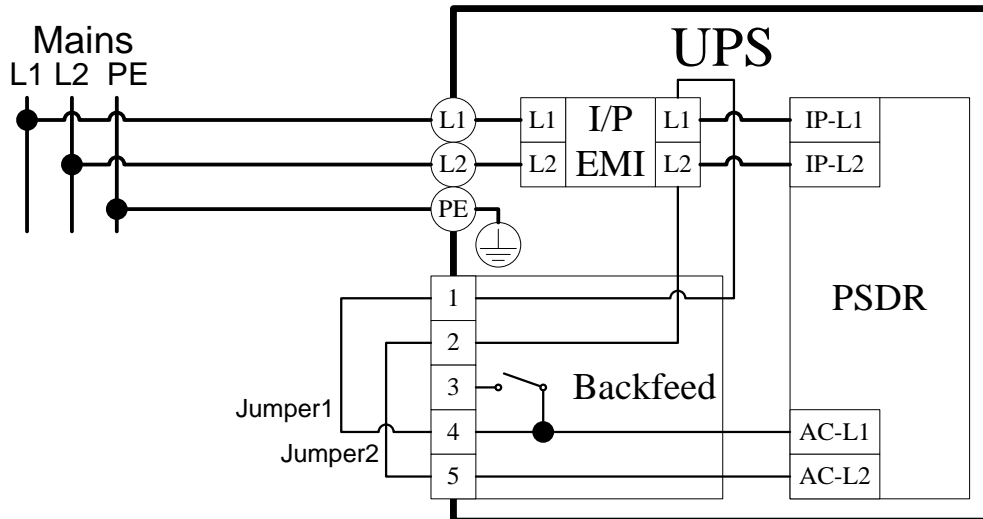
## BACKFEED PROTECTION

### **BACKFEED PROTECTION OPERATION**

1. If the Bypass circuit is shorted and the UPS is running in Line Mode or Battery Mode, backfeed protection will be active and the external isolation device (Magnetic Contactor) will open.
2. Save your data and perform a controlled shutdown.
3. Contact CyberPower for repair.

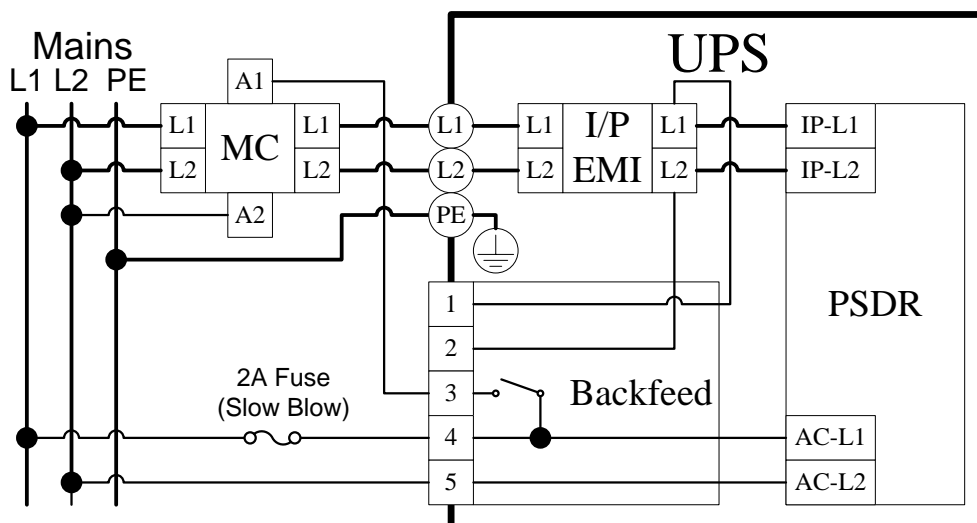
### **WITHOUT BACKFEED PROTECTION CONFIGURATION**

1. Hardwire the input terminals as shown in the following diagram.
2. Do not remove the interconnection wires (Jumper1 / Jumper2) on "Backfeed Protection Connector".



### **WITH BACKFEED PROTECTION CONFIGURATION**

1. Customers should provide an external isolation device (Magnetic Contactor) which is upstream and outside the UPS and capable of supporting the UPS input current.
2. Remove the interconnection wires (Jumper1 / Jumper2) on "Backfeed Protection Connector".
3. Hardwire the input terminals and "Backfeed Protection Connector" as shown in the following diagram.
4. The external isolation device must be installed in the Mains path.



# BASIC OPERATION

## POWER MODULE FRONT/REAR PANEL DESCRIPTION

1. Power Button / Power on Indicator  
Master ON/OFF for the UPS. Indicates that the UPS is on and supplying power.

2. UPS Status / Fault / Replace Battery LED Indicator  
Indicates the status of the UPS whether is operating in Line, Battery or Bypass Mode, or the UPS has an internal fault and the battery need to be replaced.

3. Multifunction LCD Readout  
Shows UPS status, information, settings and events.

4. Function Buttons  
Scroll up, scroll down, select and cancel LCD menu.

5. Input Circuit Breaker  
Provides input overload and fault protection.

6. Power Cord (OL6K) / Input / Output Terminal Block  
Connect to utility power / your equipment.

7. Output Circuit Breaker  
Provides output overload and fault protection.

8. Battery Backup & Surge Protected Outlets  
Provides battery backup and surge protection. They ensure power is provided to connected equipment over a period of time during a power failure.

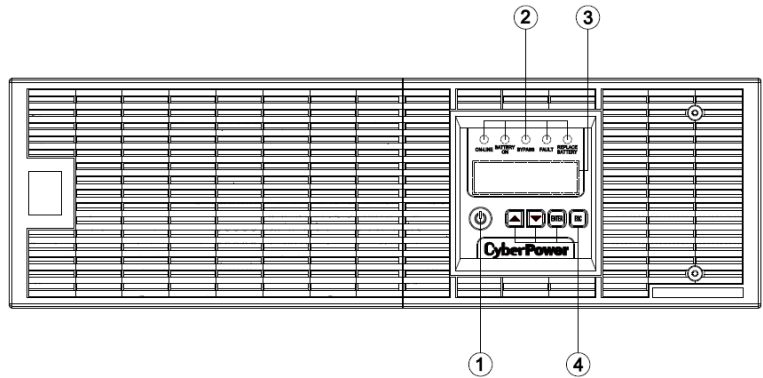
Critical / Noncritical Load  
Allows the creation of load priorities to ensure that battery power reserves are transferred to specified outlets during a power outage. The unit can be programmed to provide additional runtime for equipment connected to the "CRITICAL" outlets, while stopping the power supply to equipment connected to "NONCRITICAL" outlets after a designated period of time.

9. Serial Port  
Serial port provides communication between the UPS and the computer. The UPS can control the computer's shutdown during a power outage through the connection while the computer can monitor the UPS and alter its various programmable parameters.

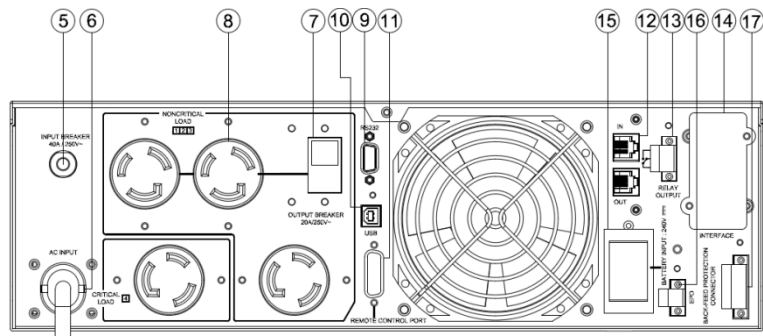
10. USB port  
This is a connectivity port which allows communication and control between the UPS and the connected computer. It is recommended to install the PowerPanel® Business Edition Agent software on the PC/Server connected with the USB cord.

11. Remote Control Port  
Connects to remote LCD module to the UPS.

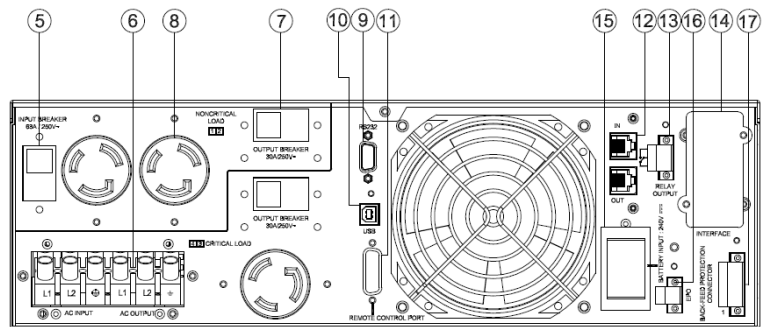
12. Surge Protected Communication Ports RJ-45/RJ-11  
These ports are used to protect standard RJ-45/RJ-11 based products (ADSL, LAN, Phone/ Modem-Lines) and cabling systems from surges.



**OL6KRT3UPM / OL8KRT3UPM / OL10KRT3UPM**



**OL6KRT3UPM**



**OL8KRT3UPM / OL10KRT3UPM**

13. Relay Output Connector  
Convert UPS signals into real potential-free Dry Contacts for industrial control.

14. SNMP/HTTP Network slot  
Slot to install the optional SNMP card for remote network control and monitoring.

15. Extended Runtime Battery Module Connector  
Connection for additional CyberPower XL Battery modules.

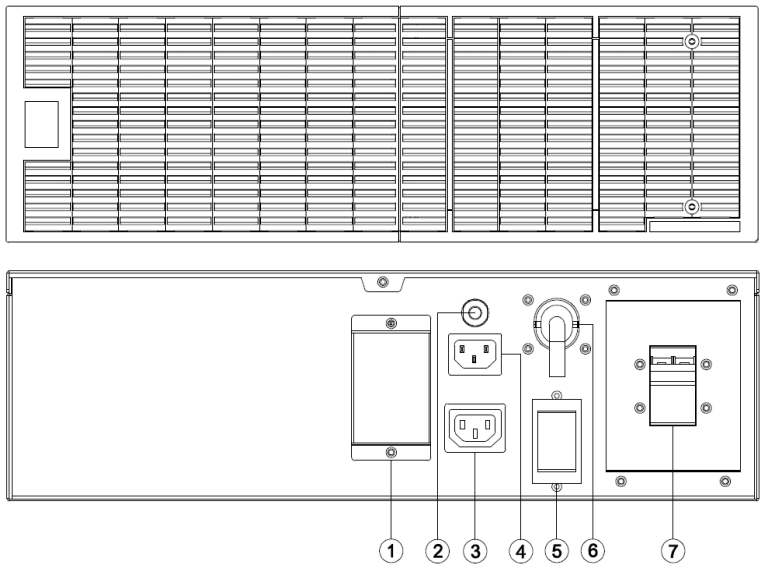
16. EPO (Emergency Power Off) Connector  
Enables an emergency UPS Power-Off from a remote location.

17. Backfeed Protection Connector  
Prevents power feedback from the inverter to utility power in case of power failure and a fault in the bypass circuit.

## BASIC OPERATION

### **BATTERY MODULE FRONT/REAR PANEL DESCRIPTION**

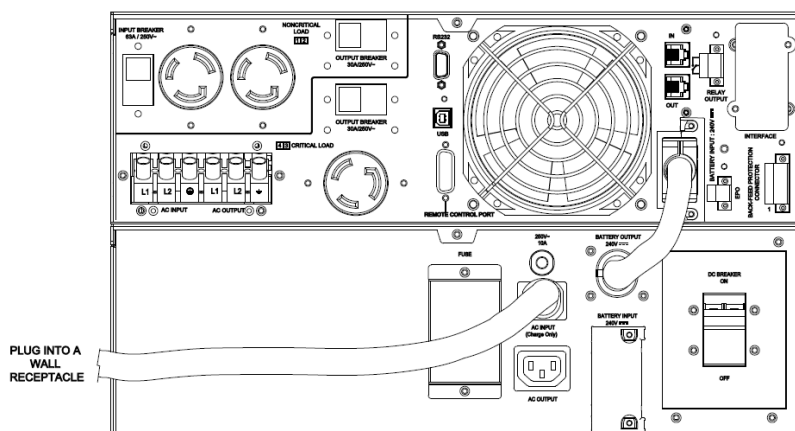
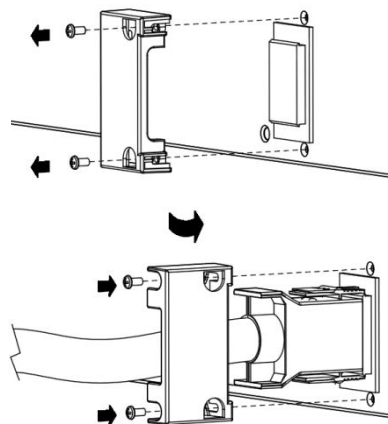
1. On-board Replaceable Fuse Cover  
Replaceable fuse is accessible from the rear panel. It must be done by qualified personnel.
2. AC Circuit Breaker  
Provides overload and fault protection.
3. AC Output Outlet  
Use this outlet to connect to the AC Input Inlet of a downstream Battery module.
4. AC Input Inlet (Charge Only)  
AC power connectivity to wall receptacle.
5. Input Connector  
Use this input connector to daisy chain the next Battery module. Remove the connector cover for access.
6. Output Cable  
Use this output cable to connect the Battery module to the Power module or to the next Battery module.
7. DC Breaker  
Use the DC breaker to disconnect battery output.



**BP240V30ART3U / BP240V50ART3U**

### **CONNECTION #1 : POWER MODULE WITH ONE BATTERY MODULE**

- Step 1:** Turn off the DC breaker of the Battery module.
- Step 2:** Loosen the two screws to remove the battery cable retention bracket of the power module.
- Step 3:** Use the output cable of the Battery module to connect the Battery module to the Power module.
- Step 4:** Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.
- Step 5:** Use a power cord to plug AC input inlet of the battery module into a wall receptacle.
- Step 6:** Turn on the DC breaker of the Battery module.



## BASIC OPERATION

### **CONNECTION #2 : POWER MODULE WITH MULTIPLE BATTERY MODULES**

Step 1: Connect the 1<sup>st</sup> Battery module to the Power module using the instructions above.

Step 2: Turn off the DC breaker of the 2<sup>nd</sup> Battery module.

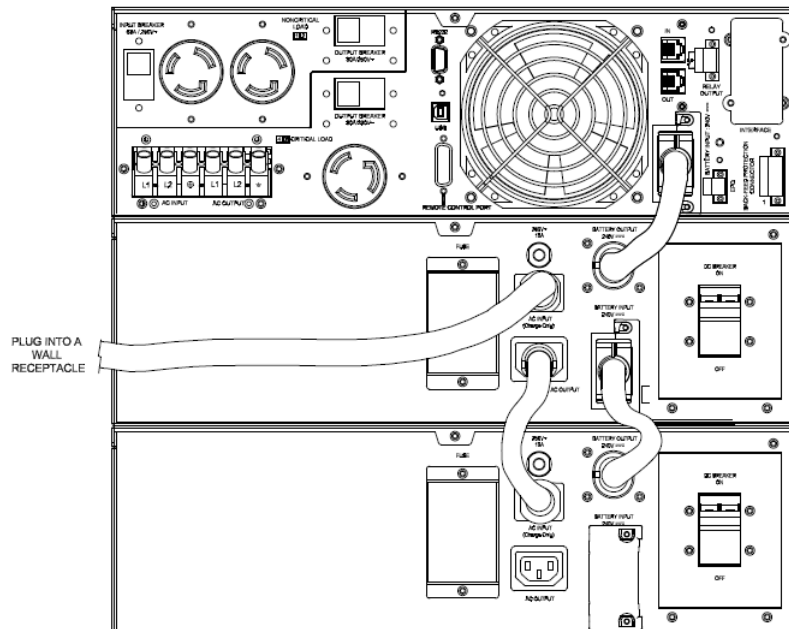
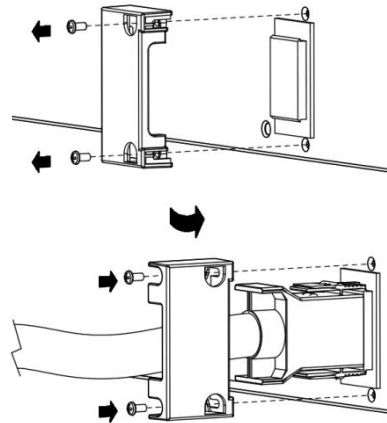
Step 3: Loosen the two screws to remove the battery cable retention bracket of the 1<sup>st</sup> battery module.

Step 4: Use the output cable of the 2<sup>nd</sup> Battery module to connect the 2<sup>nd</sup> Battery module to the 1<sup>st</sup> Battery module.

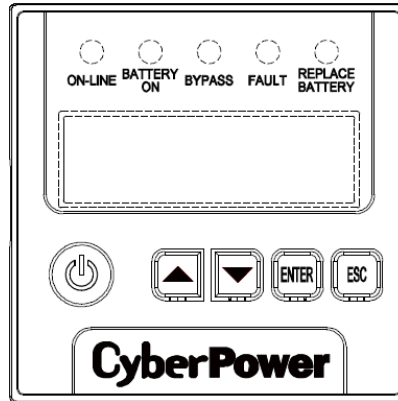
Step 5: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.

Step 6: Use a power cord to plug AC input inlet of the 2<sup>nd</sup> battery module into AC output outlet of the 1<sup>st</sup> Battery module.

Step 7: Turn on the DC breaker of the 2<sup>nd</sup> Battery module.



## OPERATION INSTRUCTIONS FOR LCD MODULE



### LED INDICATORS – UPS STATUS

LED Indicators	Color	UPS Status Description
<b>ON/OFF</b>	White	UPS power is on.
<b>ON-LINE</b>	Green	UPS is operating in Line Mode.
<b>BATTERY ON</b>	Yellow	UPS is operating in Battery Mode.
<b>BYPASS</b>	Yellow	UPS is operating in Bypass Mode, Manual Bypass or ECO (Economy) Mode.
<b>FAULT</b>	Red	UPS has an internal fault. See “Trouble Shooting” for additional information.
<b>REPLACE BATTERY</b>	Red	Battery will soon need to be replaced due to insufficient runtime.

### LCD SCREEN – UPS STATUS

LCD Screen	UPS Status Description
<b>Line Mode</b>	UPS is operating in Line Mode.
<b>Battery Mode</b>	UPS is operating in Battery Mode.
<b>Bypass Mode</b>	UPS is operating in Bypass Mode.
<b>Manual Bypass</b>	UPS is operating in Manual Bypass.
<b>ECO Mode</b>	UPS is operating in ECO (Economy) Mode.

### BUTTON OPERATION

Button	Operation Description
<b>ON/OFF</b>	Press this button to turn on or turn off UPS.
<b>▲</b>	Press this button to scroll up in the LCD menu.
<b>▼</b>	Press this button to scroll down in the LCD menu.
<b>ENTER</b>	Press this button to select an option.
<b>ESC</b>	Press this button to cancel or return to previous LCD menu.

## LCD SETUP FUNCTIONS

### MULTI-FUNCTION LCD MAIN MENU

Press “Enter” button to activate “MAIN MENU”.

MAIN MENU submenu	Function Description
Information	Displays the UPS information.
Configure	Displays the UPS settings that can be configured by the user.
Event Log	Displays the 3 most recent events, by event count, time (day/hour/minute), and event description.

### LCD INFORMATION READOUT

There are 19 types of UPS information available for display.

1. Press the “ENTER” button to activate the “MAIN MENU”.
2. Press the “▲” and “▼” buttons to scroll to the “Information” option.
3. Press the “ENTER” button to select the “Information” submenu.
4. Press the “▲” and “▼” buttons to scroll through the “Information” submenu in the following table.
5. Press the “ESC” button to return to UPS Status.

Information Submenu	Description
O/P Volt = XXX.XV	Displays the Output Voltage
O/P Freq = XX.XHz	Displays the Output Frequency
I/P Volt = XXX.XV	Displays the Input Voltage
I/P Freq = XX.XHz	Displays the Input Frequency
O/P Load = XXX%	Displays the Output Load Percentage of Maximum load
O/P Amp = X.XA	Displays the Output Current
O/P Watt =XXXXXXW	Displays the Output Wattage
O/P VA =XXXXXXVA	Displays the Output VA
BAT Volt = XXX.XV	Displays the Battery Voltage
BAT Cap = XXX%	Displays the Estimated Percentage of Battery Capacity
BAT Runtime=XXXXM	Displays the Estimated Battery Runtime in Minutes
EBM Number= X	Displays the External Battery Module Number
TEMP =XX°C / XXX°F	Displays the Approximate inside Temperature in both °C (Celsius) and °F (Fahrenheit) for the UPS
SBM = XXXXX	Displays the Stage of Smart Battery Management
Rating = XXK VA	Displays the UPS Rating
MCU Ver = XXXX	Displays the MCU Firmware Version
Model Name	Displays the UPS Model Name
Date & Time ----/--/-- --:--	Displays the present Date & Time
Next BAT Change XXX / XXXX	Displays the next Battery Change Date & Time

## LCD SETUP FUNCTIONS

### LCD EVENT LOG

3 Event Logs of UPS can be recorded.

1. Press the “ENTER” button to activate the “MAIN MENU”.
2. Press the “▲” and “▼” buttons to scroll to the “Event Log” option.
3. Press the “ENTER” button to select the “Event Log” submenu.
4. Press the “▲” and “▼” buttons to scroll through the “Event Log” submenu in the following table.
5. Press the “ESC” button to return to UPS Status.

Event Log Submenu	Description
(X)	XXDXXHXXM (without PowerPanel® Business or RMCARD302)
	-- / -- --:-- (with PowerPanel® Business or RMCARD302)

**Event Content**

### MULTI-LANGUAGE INTERFACE

Users can configure 1 of the 4 available languages for display.

([English], [Español-Spanish], [Français-French], [Deutsch-German])

1. Press the “ENTER” button to activate the “MAIN MENU”.
2. Press the “▲” and “▼” buttons to scroll to the “Configure” option.
3. Press the “ENTER” button to select the “Configure” submenu.
4. Press the “▲” and “▼” buttons to scroll through the “Language” options.
5. Press the “ENTER” button to select the “Language” submenu.
6. Press the “▲” and “▼” buttons to scroll to the language that you want to select.  
You may be prompted to save the selection, if so press the “ENTER” button to save the setting.
7. Press the “ESC” button to cancel or return to previous LCD menu.

### LCD SETTINGS CONFIGURATION

There are 24 UPS settings that can be configured by the user.

1. Press the “ENTER” button to activate the “MAIN MENU”.
2. Press the “▲” and “▼” buttons to scroll to the “Configure” option.
3. Press the “ENTER” button to select the “Configure” submenu.
4. Press the “▲” and “▼” buttons to scroll to the “Configure” submenu in the following table.
5. Press the “ENTER” button to select the setting you want to configure.

The first configuration parameter will be displayed on the second column of LCD screen.

6. Press the “▲” and “▼” buttons to scroll through the different parameters.
7. Press the “ENTER” button to select the parameter you want to change.

You may be prompted to save the selection, if so press the “ENTER” button to save the setting. Some options are saved and started automatically. (See the following table for additional details.)

8. Press the “ESC” button to cancel or return to the previous LCD menu.

## LCD SETUP FUNCTIONS

Configure Submenu	Available Settings	Default Setting
<b>Output Voltage*</b>	= [200V] [208V] [220V] [230V] [240V]	208V
<b>Sync Freq Window</b>	Range= [+/- 1%] [+/- 2%] [+/- 3%] [+/- 4%] [+/- 5%] [+/- 6%] [+/- 7%] [+/- 8%] [+/- 9%] [+/-10%]	+/- 5%
<b>Bypass V Window</b>	Range= [+10%/-10%] [+10%/-15%] [+10%/-20%] [+15%/-10%] [+15%/-15%] [+15%/-20%]	+10%/-15%
<b>Bypass Condition</b>	[Check Freq/Volt] [Check Volt Only] [No Bypass]	Check Freq/Volt
<b>ECO Mode**</b>	[Disable] [Enable] [V Range= +/-15%] [V Range= +/-10%] (for [Enable])	Disable V Range= +/-10%
<b>Manual Bypass</b>	[Disable] [Enable]	Disable
<b>Battery Test</b>	[Activate?]	None
<b>Audible Alarms</b>	[Disable] [Enable]	Enable
<b>EBM Number</b>	= [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]	0
<b>Wiring Fault</b>	[Disable] [Enable]	Disable
<b>NCL Control</b>	[Outlet On] [Outlet Off]	Outlet On
<b>Language</b>	[English] [Español-Spanish] [Français-French] [Deutsch-German]	English
<b>Generator Mode***</b>	[Disable] [Enable]	Disable
<b>Communication</b>	[Disable] [Enable]	Enable
<b>Dry Relay Set</b>	[I/P Power Fail] [Battery Low] [Summary Alarm] [UPS On Bypass] [UPS Fail]	I/P Power Fail
<b>Converter Mode****</b>	[Converter Off] [O/P Freq = 50Hz] [O/P Freq = 60Hz]	Converter OFF
<b>Screen Saver</b>	[Disable] [1 Minutes] [5 Minutes]	5 minutes
<b>Clear Event Log</b>	[Activate?]	None
<b>Button OFF LOCK</b>	[Disable] [Enable]	Disable
<b>Charger Function</b>	[SBM] [Constant]	SBM
<b>Signal Inputs</b>	[Disable] [EPO][ROO]	Disable
<b>Charger Check</b>	[Disable] [Enable]	Disable
<b>With Transformer</b>	[Disable] [Enable]	Disable
<b>Backfeed Check</b>	[Disable] [Enable]	Disable

\*) 200V are derated by 20%, 208 V are derated by 10% for OL6000RT3U

\*\*) This function can't be set when Manual Bypass, Generator Mode or Converter Mode is enabled.

\*\*\*) UPS has no bypass when Generator Mode is enabled.

\*\*\*\*) UPS has no bypass when Converter Mode is enabled. This function can only be set before the UPS is on.

### **SILENCING AUDIBLE ALARMS**

1. Press any of four function buttons on the LCD module; Note: the alarm can not be turned off for a **"Battery Low"** condition. This condition will still result in an audible alarm.
2. Configure **"Audible Alarms"** as **"Disable"** on the LCD module and it will stop warning of any malfunction audibly.

### **MANUAL BATTERY TEST**

Configure **"Battery Test"** as **"Active"** on the LCD module; and it will perform the **"Manual Battery Test"**



## LCD MODULE REMOTE CONTROL and WALL-MOUNTING INSTRUCTIONS

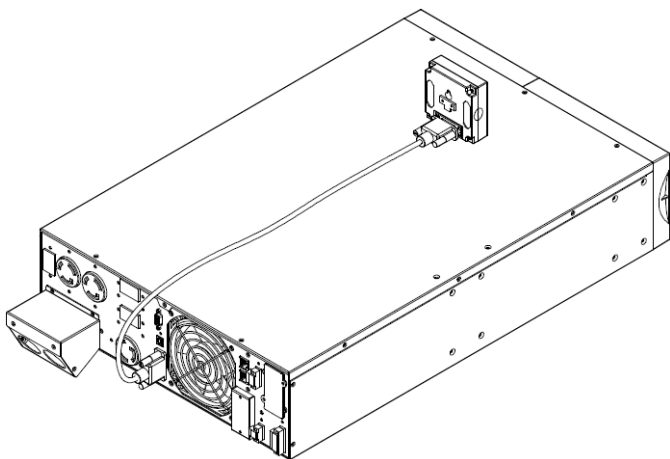
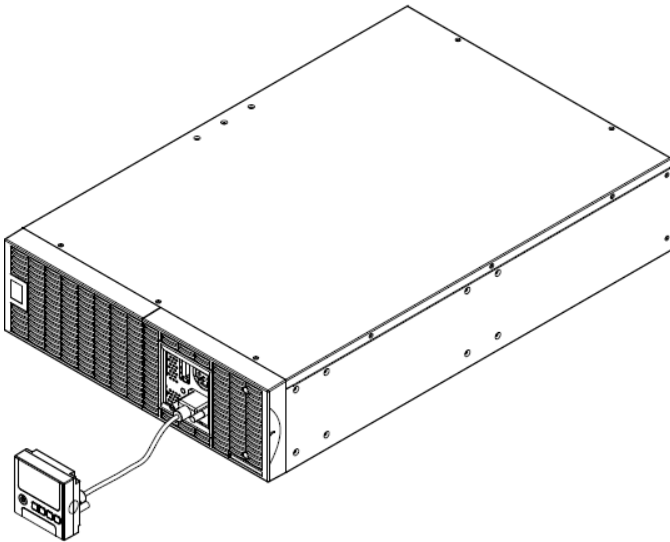
### REMOTE CONTROL

#### **Step 1: Remove the Multifunction LCD Module**

Unscrew the right panel of the Power module. Separate the right panel from the UPS. Gently lift the LCD module out. Reinstall the right panel.

#### **Step 2: Connect the DB26 Cable**

Connect the DB26 cable from LCD module to the “**Remote Control Port**” on the front panel or rear panel as shown in the following figure.



### WALL-MOUNTING INSTRUCTIONS

#### **Step 1: Remove the Multifunction LCD Module**

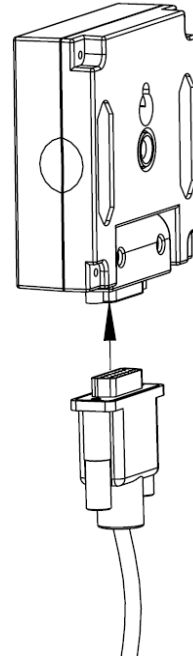
Unscrew the right panel of the Power module. Separate the right panel from the UPS. Gently lift the LCD module out. Reinstall the right panel.

#### **Step 2: Rotate the DB26 Connector of LCD Module**

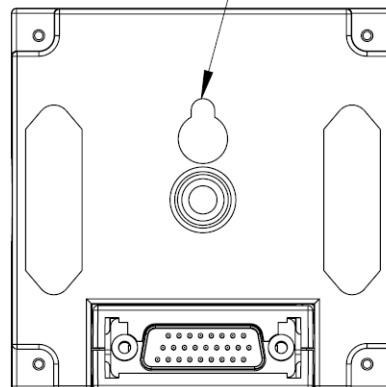
#### **Step 3: Connect the DB26 Cable**

Connect the DB26 cable from LCD module to the “**Remote Control Port**” on the front panel or rear panel as shown in the following figure.

#### **Step 4: Mount LCD Module on the Wall**



Wall mounting hole  
 $\varnothing 10^* \varnothing 5^* 13.8L$



### SAFETY PRECAUTIONS

**CAUTION!** It must be done by qualified personnel.

**CAUTION!** To avoid electric shock, turn off and unplug the unit before installing REMOTE CONTROL or WALL-MOUNTING INSTRUCTIONS.

## MAINTENANCE

### **Storage**

To store your UPS for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

### **Battery Replacement**

Please read and follow the Safety Instructions before servicing the battery. Battery replacement should be performed by trained personnel who are familiar with the procedures and safety precautions. Make a note of the replacement Battery module number.

### **Safety Precautions**

**CAUTION!** Only use replacement batteries which are certified by CyberPower Systems. Use of incorrect battery type is an electrical hazard that could lead to explosion, fire, electric shock, or short circuit.

**CAUTION!** Batteries contain an electrical charge that can cause severe burns. Before servicing batteries, please remove any conductive materials such as jewelry, chains, wrist watches, and rings.

**CAUTION!** Do not open or mutilate the batteries. Electrolyte fluid is harmful to the skin/eyes and may be toxic.

**CAUTION!** To avoid electric shock, turn off and unplug the UPS from the wall receptacle before servicing the battery.

**CAUTION!** Only use tools with insulated handles. Do not lay tools or metal parts on top of the UPS or battery terminals.

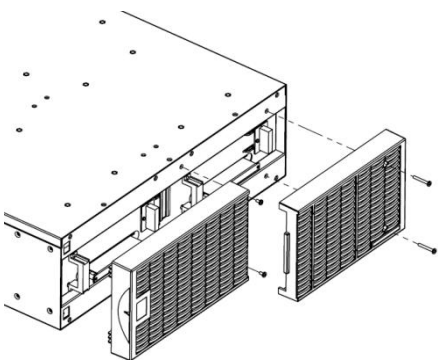
### **Replacement Batteries**

Please refer to the front side of the Battery module for the model number of the correct replacement batteries. For battery procurement, log onto [www.CPSww.com](http://www.CPSww.com), or contact your local dealer.

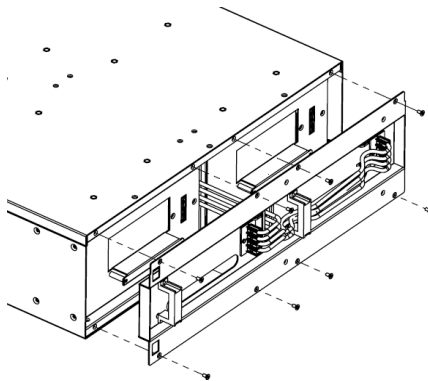
### **Battery Disposal**

Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire.

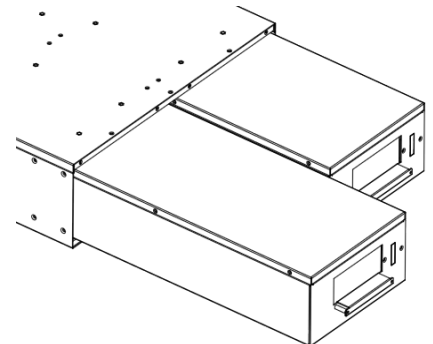
### **Battery Installation**



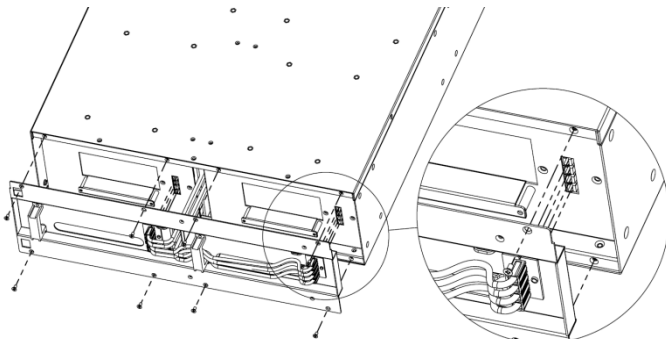
Step 1: Remove the front panels



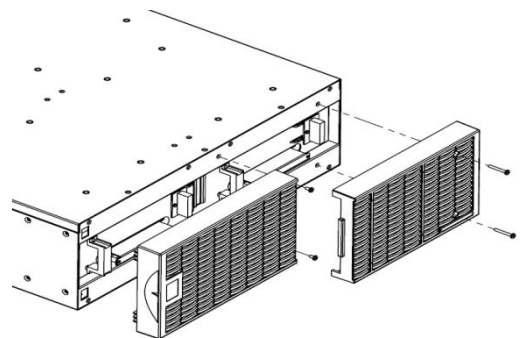
Step 2: Remove the retaining screws from the cable protection cover and then remove the cover itself



Step 3: Pull the battery trays out slowly and then put the new battery trays back into the compartment



Step 4: Insert the battery connectors and tighten the screws of battery retaining cover



Step 5: Install the front panels

## TECHNICAL SPECIFICATIONS

Model	OL6000RT3U	OL8000RT3U	OL10000RT3U
<b>Configuration</b>			
Capacity (VA)	6000VA	8000VA	10000VA
Capacity (Watts)	5400W	7200W	9000W
Form Factor	Rackmount / Tower		
Energy-saving Technology	Yes, ECO Mode Efficiency > 95%		
<b>Input</b>			
Input Voltage Range	200~240Vac		
Input Frequency Range	40~70Hz		
Input Power Factor	0.99		
Cold Start	Yes		
<b>Output</b>			
Output Waveform	Sine wave		
Output Voltage*	200, 208, 220, 230, 240Vac (Configurable) $\pm 2\%$		
Output Frequency	50 / 60Hz (Auto-Sensing or Configurable) $\pm 0.25\text{Hz}$		
Transfer Time (Typically)	0ms		
Rated Power Factor	0.9		
Harmonic Distortion	THD < 3% at Linear Load, < 5% at Non-linear Load		
Crest Factor	3 : 1		
ECO Mode Voltage Regulation	$\pm 10\%$ , $\pm 15\%$ (Configurable)		
UPS Outlets	(2) L6-20R, (2) L6-30R	(3) L6-30R, (1) Terminal block	
<b>Protection</b>			
Surge Protection	IEC 61000-4-5 Level 3		
Phone / Network Protection	RJ11/RJ45 (One In/One Out)		
Overload Protection	Line Mode : 105~125% Load for 1 min, 126~150% Load for 10 sec Battery Mode : 105~130% Load for 10 sec, 131~150% Load for 2 sec		
Short Circuit Protection	UPS Output Cut off Immediately or Input Fuse / Circuit Breaker Protection		
<b>Battery</b>			
Specifications	(20) 12V/7.2AH	(20) 12V/9.0AH	
Recharge Time (Typically)	4 hours	5 hours	
Sealed, Maintenance Free	Yes		
Hot-Swappable	Yes		
<b>Status Indicators</b>			
LCD Screen	Multi-Function LCD Readout that Supports : Multi-Language Interface, (19) Types of Read Out, (24) Types of Function Setting, (3) Event Logs		
LED Indicators	Power On (White), Line Mode (Green), Battery Mode (Yellow), Bypass Mode (Yellow), Fault (Red), Replace Battery (Red)		
Audible Alarms	Battery Mode, Battery Low, Overload, UPS Fault, Replace Battery		
<b>Environment</b>			
Operating Temperature	32°F to 104°F ( 0°C to 40°C)		
Operating Relative Humidity	0 to 90% Non-Condensing		
<b>Management</b>			
On-Device Features	Self Test, Auto-Charge, Auto-Restart, Auto-Overload Recovery		
Connectivity Ports	(1) Serial Port (RS232), (1) USB Port, (1) Remote Control Port, (1) Relay Out		
SNMP/HTTP Capable	(1) Expansion Port (With optional SNMP card or RMCARD 302)		
<b>Software</b>			
Power Management Software	PowerPanel® Business Edition		
<b>Physical</b>			
Dimensions--Power Module	L x W x H = 26 x 17 x 5.2in. (66 x 43.3 x 13.2cm)		
Dimensions--Battery Module	L x W x H = 26 x 17 x 5.2in. (66 x 43.3 x 13.2cm)		
Net Weight--Power Module	53lbs(24Kg)		
Net Weight--Battery Module	167.2lbs(76Kg)	171.6lbs(78Kg)	
<b>Safety</b>			
Conformance Approvals	CE, UL		

\*)200V are derated by 20%, 208 V are derated by 10% for OL6000RT3U

## TROUBLE SHOOTING

Problem	Possible Cause	Solution
<b>Warning</b>		
O/P Overload	Your equipment requires more power than the UPS can provide. If the UPS is in Line Mode then it will transfer to Bypass Mode; if the UPS is in Battery Mode it will shutdown.	Shut off non-essential equipment. If this solves the overload problem, the UPS will transfer to normal operation.
Load Over XXX%	Your equipment requires more power than the setting in the Power Management Software (PowerPanel® Business) will allow.	Shut off the non-essential equipment or increase the level in the Power Management Software.
Battery Mode	UPS is operating on battery power.	Save your data and perform a controlled-shutdown.
Battery Low	UPS is operating on battery power and will be shutting down soon due to extremely low battery voltage.	UPS will restart automatically when acceptable utility power returns.
BAT Disconnected	Missing battery power.	Check battery connector and battery breaker.
Battery Failure	UPS has failed in Battery Test.	1. Check battery connector and battery breaker. 2. Contact technical support to replace the battery.
Replace Battery	Battery will soon need to be replaced due to insufficient runtime.	Contact technical support to replace the battery.
EPO OFF	Missing the EPO connection.	Check the EPO connection.
Wiring Fault	Line and neutral wires are reversed.	Exchange line and neutral wires.
	Missing ground wire.	Connect ground wire.
	No ground wire.	Disable Wiring Fault alarm on LCD panel.
Line Abnormal	Wrong utility power backed up during UPS auto-restart.	Check whether voltage or frequency of utility power is out of range.
Output Short	Output short circuit.	Your attached equipment may have problems, please remove them and check again.
Over Temperature	High ambient temperature.	Check the fan for operation and if the ventilation hole has been covered.
Coldstart Lock	UPS is locked to prevent consuming battery power during shipping.	Plug into utility power for first-time operation.
Autorestart Lock	“Automatic Restore” is disabled in Power Management Software (PowerPanel® Business)	Press “ON/OFF” button to turn on UPS
Bypass Forbidden	Manual Bypass Forbidden when the LCD screen shows “Generator On” or “Converter On”.	Slide the Interlock Bracket to the right. (For the PDU or HW PDU only)
<b>Fault</b>		
Over Charge	Battery is overcharged.	1. Remove battery connector and check charger voltage. 2. Contact CyberPower for repair.
Charger Failure	Charger has failed.	
High O/P V	Output voltage is too high.	1. Shut down UPS and turn off input breaker. 2. Contact CyberPower for repair.
Low O/P V	Output voltage is too low.	
Bus Fault	Internal DC bus voltage is too high or too low.	

**CyberPower Systems Inc.**

www.cpsww.com

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## PRODUCT REGISTRATION

CyberPower requests that you complete and return the Warranty Registration Card enclosed with the Product or register the Product at its website ([www.cpsww.com](http://www.cpsww.com)) to establish that you are the Initial Customer of the Product, and therefore entitled coverage under the Limited Warranty and the Connected Equipment Guarantee. (Registration is not required for coverage, but note: if you do not register your purchase, you will be required to provide proof of purchase.)

## LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

Read the following terms and conditions carefully before using the CyberPower OL6000RT3U / OL8000RT3U / OL10000RT3U. By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

### Who is Providing this Warranty?

CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

### What Does This Warranty Cover?

This warranty covers defects in materials and workmanship in the Product under normal use and conditions. It also covers equipment that was connected to the Product and damaged because of the failure of the Product.

### What is the Period of Coverage?

This warranty covers the Product for three years and connected equipment for as long as you own the Product.

### Who Is Covered?

This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

### How Do You Get Warranty Service?

1. Before contacting CyberPower, identify Your Product model number, the Purchase Date, and each item of Connected Equipment.
2. Email us at [tech@cpsww.com](mailto:tech@cpsww.com) or Call us at (877) 297-6937.
3. If your product requires warranty service you must provide a copy of your dated purchase receipt or invoice.

### How Do You Open A Connected Equipment Claim?

1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379, or send us an e-mail message at [claims@cpsww.com](mailto:claims@cpsww.com) for instructions, within 10 days of the occurrence.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a dated purchase receipt (or other proof of the original purchase) and provide a description of the damage to your connected equipment.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. **You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.**

### How Long Do I Have To Make A Claim?

All claims must be made within ten days of the occurrence.

### What Will We Do To Correct Problems?

CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

If it appears that our Product failed to protect any equipment plugged into it, we will also send you forms for making your claim for the connected equipment. We will repair or replace the equipment that was damaged because of the failure of our Product or pay you the fair market value (NOT REPLACEMENT COST) of the equipment at the time of the damage. We will use Orion Blue Book, or another a third-party valuation guide, or eBay, craigslist, or other source to establish that amount. Our maximum liability is limited to \$300,000 for OL6000RT3U / OL8000RT3U / OL10000RT3U.

## LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

### Who Pays For Shipping?

We pay when we send items to you; you pay when you send items to us.

### What Are Some Examples Of What This Warranty Does Not Cover?

1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

### What Other Limitations Apply?

The sole and exclusive remedies of the Initial Customer are those provided by this Warranty.

1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.

The Product was designed to eliminate disrupting and damaging effects of momentary (less than 1ms) voltage spikes or impulses from lightning or other power transients. If it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void. CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)
3. Damage from any circumstance described as excluded above with respect to the Product.
4. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.
5. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding "Connected Equipment" under this Warranty], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.
6. The Product is not for use in high-risk activities or with aquariums. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or with aquariums. CyberPower does not authorize use of any Product in any High Risk Activities or with Aquariums. **ANY SUCH USE IS IMPROPER AND IS A MISUSE OF THE PRODUCT.**

### Where Can I Get More Information?

The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

CyberPower is the warrantor under this Limited Warranty.

For further information please feel free to contact CyberPower at CyberPower Systems (USA), Inc. 4241 12th Ave E., STE 400, Shakopee, MN 55379; call us at (877) 297-6937; or send us an e-mail message at [claims@cyberpowersystems.com](mailto:claims@cyberpowersystems.com).

## CONFORMANCE APPROVALS



### FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

**WARNING!!** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Shielded signal cables must be used with this product to ensure compliance with the Class A FCC limits.

**The Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.**

**Cet appareil numerique de la class A respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.**

This document is believed to be accurate, but CyberPower reserves the right to change or correct the contents and does not assume any responsibility for omissions or errors.

### Need Additional Help?

Feel free to contact our Tech Support department with installation, troubleshooting, or general product questions.

### CyberPower Technical Support

Phone: 1-877-297-6937

Email: [tech@cpsww.com](mailto:tech@cpsww.com)

Web: [www.CPSww.com](http://www.CPSww.com)

Mail: 4241 12th Avenue E, Suite 400 Shakopee, MN 55379

### Hours of Operation:

Monday – Friday, 8:00am – 5:00pm (CST)

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# **User's Manual**

## **Step-Down Transformer**

OL8K10KRT3UTF

CyberPower Systems (USA), Inc.

4241 12th Avenue East Suite 400 Shakopee, MN 55379

Phone: 877-297-6937

Fax: 952-403-0009

[www.CPSww.com](http://www.CPSww.com)

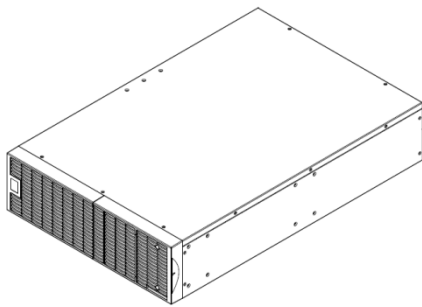
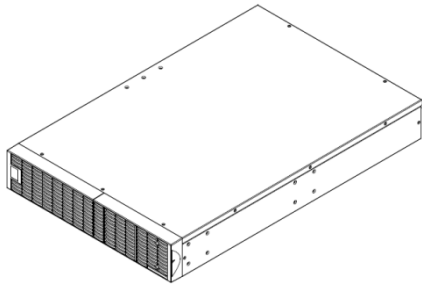
K01-0000212-01



## OVERVIEW

The CyberPower Step-Down Transformers support installation with power cord L6-30P (OL6KRT2UTF / OL8K10KRT3UTF) or hardwire (OL6KRT2UTFHW / OL8K10KRT3UTFHW), and are designed for a variety of CyberPower UPS systems. When combined with the UPS, the Step-Down Transformer converts voltage from 200-240V down to 100-120V.

## UNPACKING



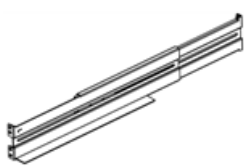
2U or 3U Step-Down Transformer



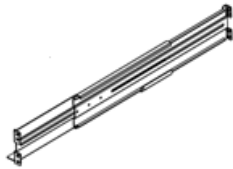
User's manual



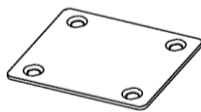
Registration card



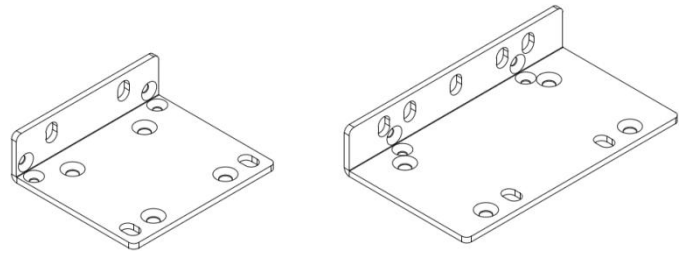
Rackmount left rail



Rackmount right rail



Tie plate (1) \* 1 set



2U or 3U Rackmount ears (Stands) (2) \* 1 set



Flat head screws: M5X8L (8) \* 1 set



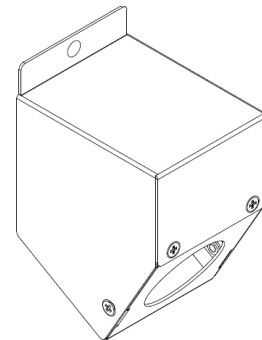
Pan head screws: M5X12L (12) \* 1 set



Plastic washers (8) \* 1 set



Screw hole dust covers (10) \* 1 set



Input terminal block cover

# HARDWARE INSTALLATION

## HARDWARE INSTALLATION

These versatile Step-Down Transformers can be mounted in a rackmount or vertical tower orientation. This versatility is especially important to growing organizations with changing needs that value having the option to position a Step-Down Transformer on a floor or in a rackmount system. Please follow the instructions below for the respective mounting methods.

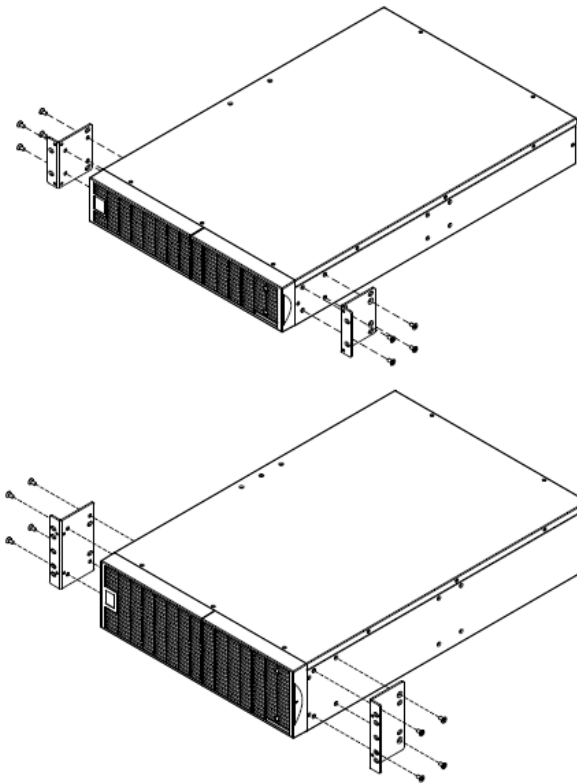
## SAFETY PRECAUTIONS

**CAUTION!** To prevent the risk of fire or electric shock, only use the supplied hardware to attach the mounting brackets.

## RACKMOUNT INSTALLATION

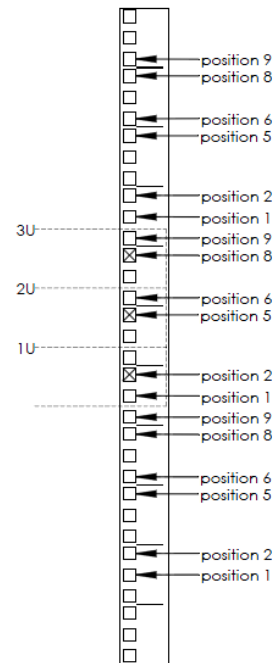
### Step 1: Rackmount ears installation

Attach the two rackmount ears to the Step-Down Transformer using the provided screws M5X8L\*8pcs.



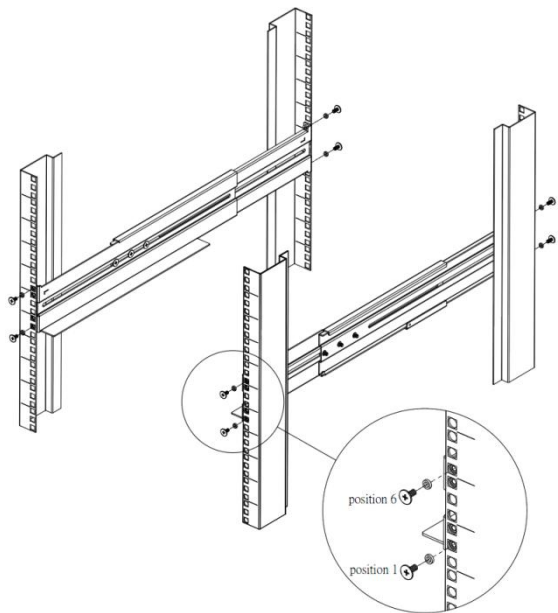
### Step 2: Rackmount rail Installation

The rails adjust to mount in 48-cm (19-inch) panel racks from 52 to 91.5cm (20.5 to 36 inches) deep. Select the proper holes in the rack for positioning the Step-Down Transformer in the rack. The 2U Step-Down Transformer takes up position 1 through position 6. The 3U Step-Down Transformer takes up position 1 through position 9.



### Step 3: Adjust rackmount rails to fit your rack

Attach the rackmount rail to your rack with two M5X12L screws and two plastic washers at the front of the rack. (Located in position 1 & position 6) Do not tighten the screws. Adjust the rail size on the rail assembly of your rack. Secure the rail to the rear of the rack with two M5X12L screws and two plastic washers. Tighten all screws at the front and rear of the rail.



Place the Step-Down Transformer on a flat stable surface with the front of the unit facing toward you. Secure the Step-Down Transformer to your rack with four M5X12L screws at the front of the rack. The 2U Step-Down Transformer takes up position 2 through position 5. The 3U Step-Down Transformer takes up position 2 through position 8.

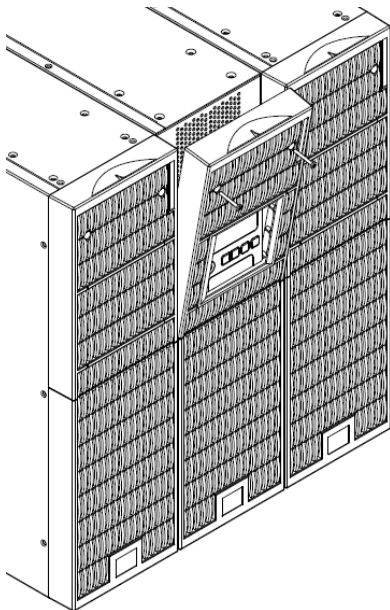
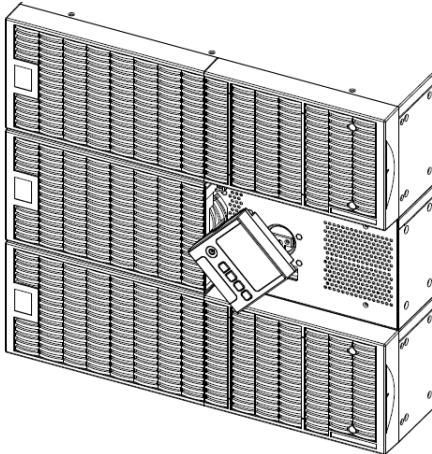
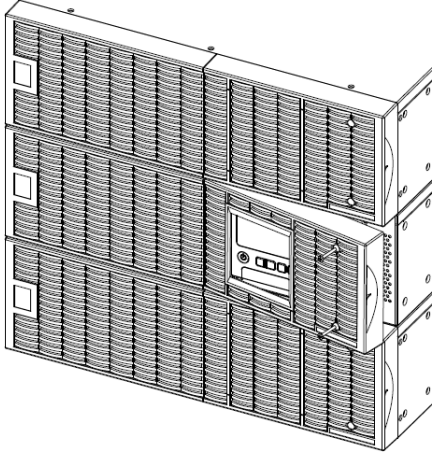
**CAUTION!** The Step-Down Transformer must be installed above the power module.

## HARDWARE INSTALLATION

### VERTICAL/TOWER INSTALLATION

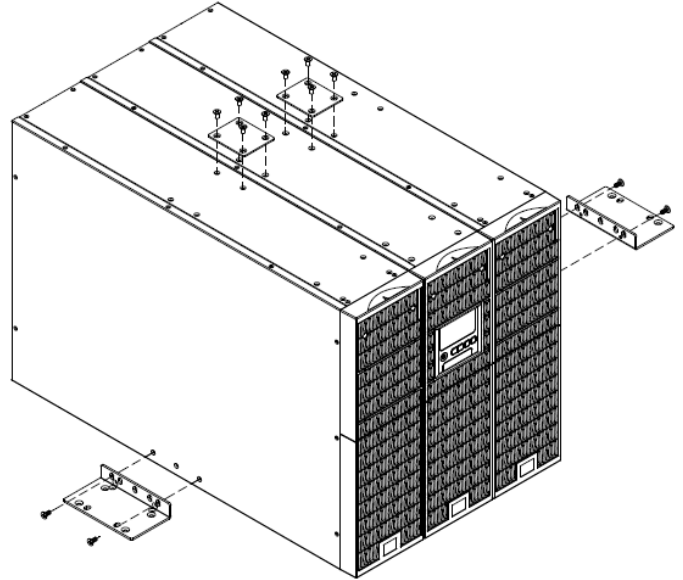
#### **Step 1: Rotate the Multifunction LCD Module**

Unscrew the right panel of the power module. Separate the right panel from the UPS. Gently lift the LCD module out. Rotate it to the tower orientation. Reinstall it for a tower configuration.



#### **Step 2: Attach the base stands**

Secure the tie bracket with the screws (M5X8\*4pcs). Tighten the screws (M5X12\*4pcs) of the base stands (rackmount ears) onto the bottom of the power module and the Battery module.



#### **Step 3: Attach dust covers**

Insert dust covers into the rackmount ear screw holes that are not being used.

### SAFETY PRECAUTIONS

**CAUTION!** Installation environment should be in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this UPS where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).

**CAUTION!** Never install a UPS, or associated wiring or equipment, during a lightning storm.

**CAUTION!** Do not work alone under hazardous conditions.

**CAUTION!** In case of the risk of electric shock, do not remove the top cover.

**CAUTION!** The battery can energize hazardous live parts inside even when the AC input power is disconnected.

## HARDWIRING THE INPUT TERMINALS

### **SAFETY PRECAUTIONS**

**CAUTION!** Input and Output circuit breakers must be "OFF" during the building installation.

**CAUTION!** The OL6KRT2UTF and OL8K10KRT3UTF with power cord L6-30P DO NOT require hardwiring. Use the attached power cord to connect to the UPS outlet.

**CAUTION!** The OL6KRT2UTFHW and OL8K10KRT3UTFHW require them to be hard wired into the UPS. Only qualified maintenance personnel should perform this task.

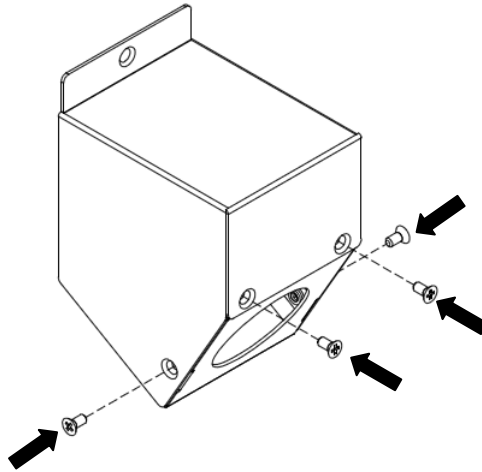
### **CHECK WIRING**

Check wiring dimensions with the following table.

Step-Down Transformers with hardwire	Wiring AWG	Wiring mm <sup>2</sup>
OL6KRT2UTFHW	10 AWG	5.5 mm <sup>2</sup>
OL8K10KRT3UTFHW	8 AWG	8.0 mm <sup>2</sup>

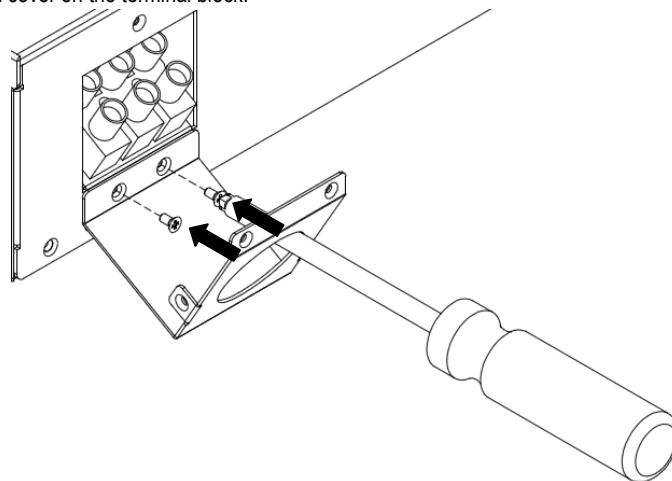
### **Step 1: Separate the top and bottom covers**

Loosen the four screws to separate the top and bottom covers.



### **Step 2: Fix the bottom cover on the terminal block**

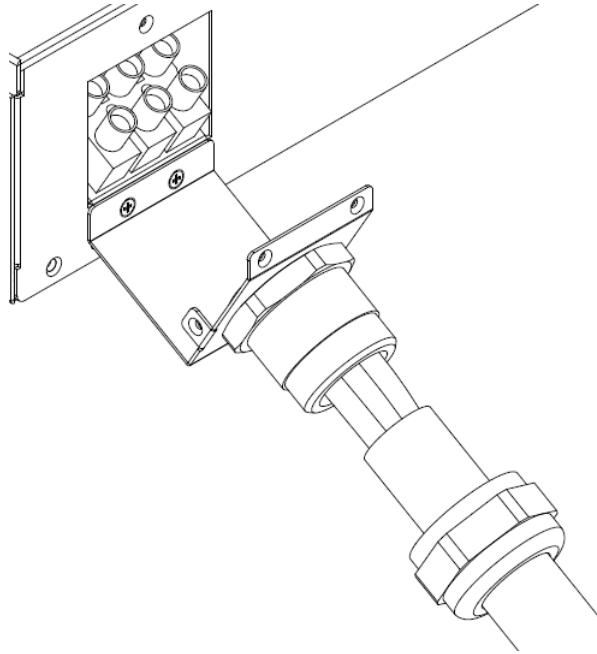
Tighten the two screws to fix the bottom cover on the terminal block.



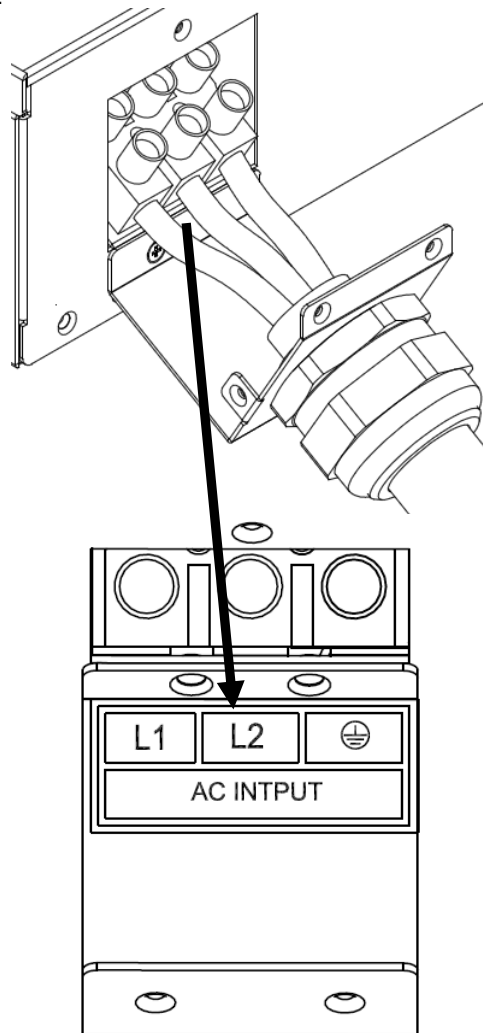
## HARDWIRING THE INPUT/ OUTPUT TERMINALS

### Step 3: Input configuration

Insert the input cable through the appropriate cable gland (not included).



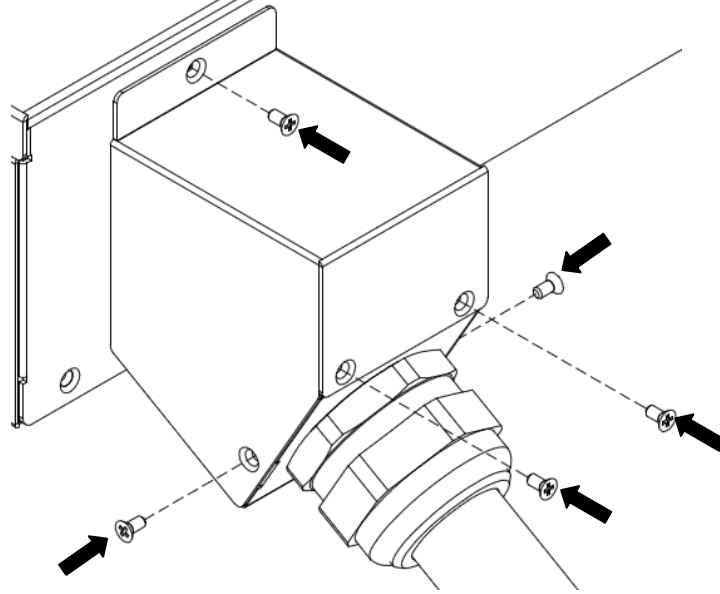
Connect the three wires to the input terminal block.



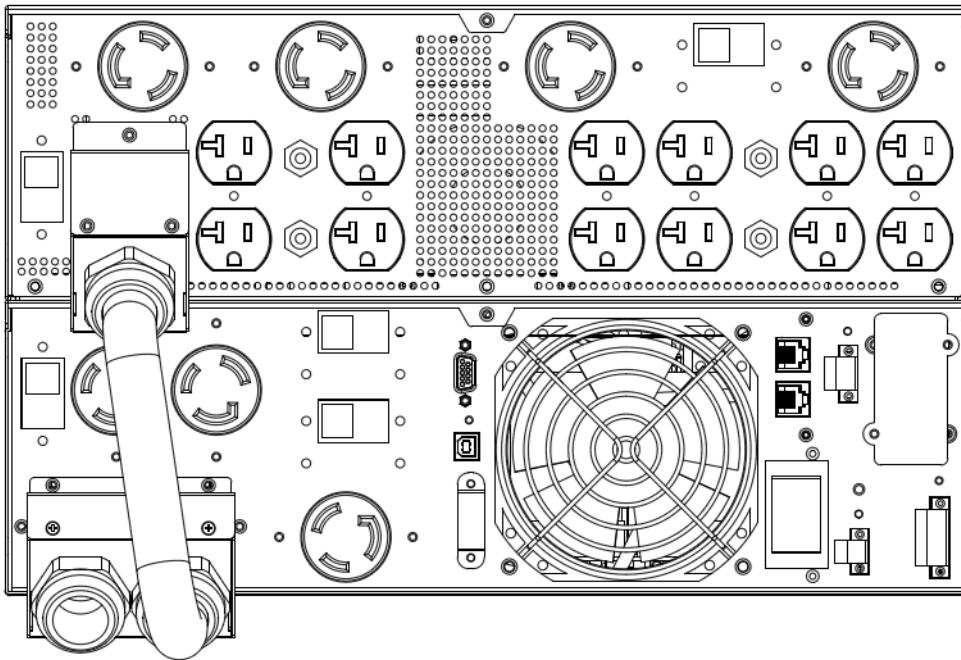
## HARDWIRING THE INPUT/ OUTPUT TERMINALS

### Step 4: Fix the top cover on the bottom cover

Tighten the five screws to fix the top cover on the bottom cover.



### Step 5: Connect the other side of the input cable to UPS output terminal block.



# BASIC OPERATION

## STEP-DOWN TRANSFORMER FRONT/REAR PANEL DESCRIPTION

**1. Input Circuit Breaker**

Provides input overload and fault protection.

**2. Input Power Cord / Input Terminal Block**

Connect to UPS outlet / output terminal block.

**3. Battery Backup & Surge Protected Outlets (120Vac)**

Provides battery backup and surge protection. They ensure power is provided to connected equipment over a period of time during a power failure.

**4. Output Circuit Breaker (120Vac)**

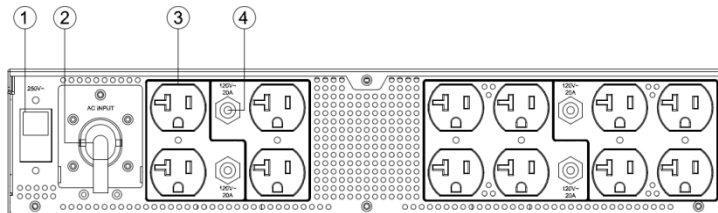
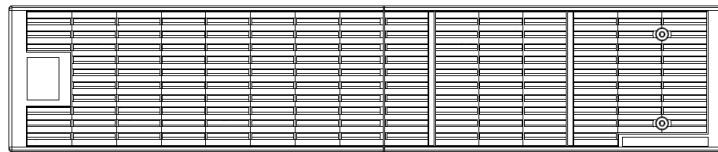
Provides output overload and fault protection.

**5. Battery Backup & Surge Protected Outlets (208Vac)**

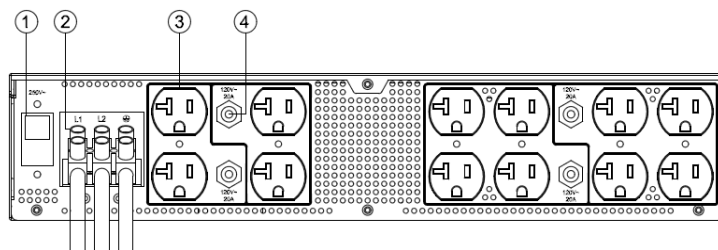
Provides battery backup and surge protection. They ensure power is provided to connected equipment over a period of time during a power failure.

**6. Output Circuit Breaker (208Vac)**

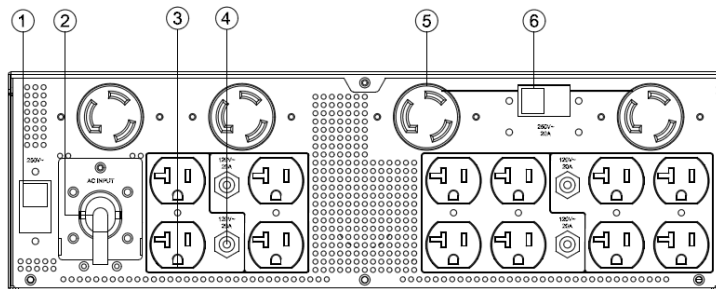
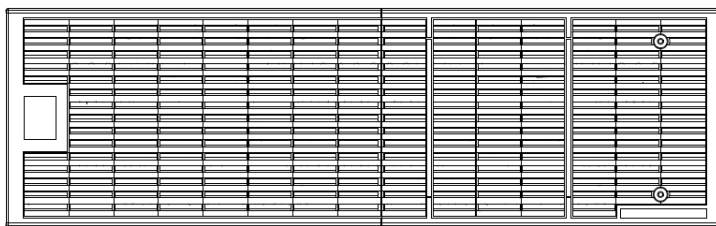
Provides output overload and fault protection.



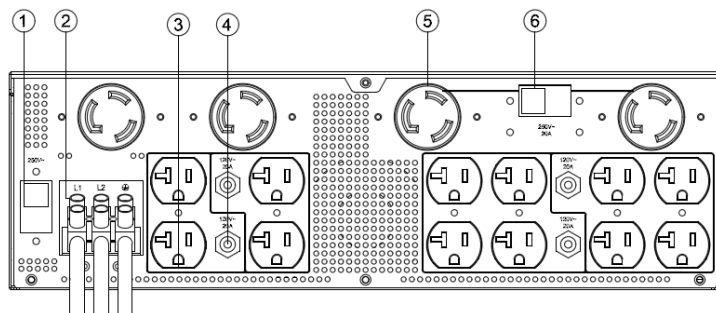
**OL6KRT2UTF**



**OL6KRT2UTFHW**



**OL8K10KRT3UTF**



**OL8K10KRT3UTFHW**

## TECHNICAL SPECIFICATIONS

Model	OL6KRT2UTF	OL6KRT2UTFHW	OL8K10KRT3UTF	OL8K10KRT3UTFHW
<b>Configuration</b>				
Maximum Output Power (VA)	5000VA	6000VA	5000VA	8000VA
Maximum Output Power (W)	5000W	5400W	5000W	7200W
Form Factor	Rackmount / Tower			
<b>Input</b>				
Nominal Input Voltage	208Vac			
Input Voltage Range	200-240Vac			
Input Current Rating	24A	30A	24A	40A
Input Frequency	50/60Hz			
<b>Output</b>				
Nominal Output Voltage	120Vac			
UPS Outlets	(12) 5-20R		(12) 5-20R, (2) L6-20R, (2) L6-30R	
<b>Physical</b>				
Dimensions	L x W x H = 26 x 17 x 3.46in. (66 x 43.3 x 8.8cm)		L x W x H = 26 x 17 x 5.2in. (66 x 43.3 x 13.2cm)	
Net Weight	128.3lbs(58.3Kg)		159.7lbs(72.6Kg)	
<b>Environment</b>				
Operating Temperature	32°F to 104°F ( 0°C to 40°C)			
Operating Relative Humidity	0 to 90% Non-Condensing			
<b>Safety</b>				
Conformance Approvals	CE, UL			

### **SAFETY PRECAUTIONS**

**CAUTION!** Before connecting to the UPS, check that the input voltage into the UPS is within specifications.

**CyberPower Systems Inc.**

[www.cpsww.com](http://www.cpsww.com)

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## PRODUCT REGISTRATION

CyberPower requests that you complete and return the Warranty Registration Card enclosed with the Product or register the Product at its website ([www.cpsww.com](http://www.cpsww.com)) to establish that you are the Initial Customer of the Product, and therefore entitled coverage under the Limited Warranty and the Connected Equipment Guarantee. (Registration is not required for coverage, but note: if you do not register your purchase, you will be required to provide proof of purchase.)

## LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

Read the following terms and conditions carefully before using the CyberPower OL6KRT2UTF / OL8K10KRT3UTF / OL6KRT2UTFHW / OL8K10KRT3UTFHW. By using the Product you consent to be bound by and become a party to the terms and conditions of this Limited Warranty and Connected Equipment Guarantee (together referred to as this "Warranty"). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

### Who is Providing this Warranty?

CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

### What Does This Warranty Cover?

This warranty covers defects in materials and workmanship in the Product under normal use and conditions. It also covers equipment that was connected to the Product and damaged because of the failure of the Product.

### What is the Period of Coverage?

This warranty covers the Product for three years and connected equipment for as long as you own the Product.

### Who Is Covered?

This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

### How Do You Get Warranty Service?

1. Before contacting CyberPower, identify Your Product model number, the Purchase Date, and each item of Connected Equipment.
2. Email us at [tech@cpsww.com](mailto:tech@cpsww.com) or Call us at (877) 297-6937.
3. If your product requires warranty service you must provide a copy of your dated purchase receipt or invoice.

### How Do You Open A Connected Equipment Claim?

1. Call us at (877) 297-6937 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379, or send us an e-mail message at [claims@cpsww.com](mailto:claims@cpsww.com) for instructions, within 10 days of the occurrence.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the Initial Customer and Request a Claim Number.
3. You must provide a dated purchase receipt (or other proof of the original purchase) and provide a description of the damage to your connected equipment.
4. Pack and ship the product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. **You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.**

### How Long Do I Have To Make A Claim?

All claims must be made within ten days of the occurrence.

### What Will We Do To Correct Problems?

CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

## LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

### Who Pays For Shipping?

We pay when we send items to you; you pay when you send items to us.

### What Are Some Examples Of What This Warranty Does Not Cover?

1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

### What Other Limitations Apply?

The sole and exclusive remedies of the Initial Customer are those provided by this Warranty.

1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.

The Product was designed to eliminate disrupting and damaging effects of momentary (less than 1ms) voltage spikes or impulses from lightning or other power transients. If it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void. CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1. Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)
3. Damage from any circumstance described as excluded above with respect to the Product.
4. Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.
5. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property [EXCEPT FOR (AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding "Connected Equipment" under this Warranty], loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.
6. The Product is not for use in high-risk activities or with aquariums. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would affect operation or safety of any medical or life support device (collectively, "High Risk Activities"). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or with aquariums. CyberPower does not authorize use of any Product in any High Risk Activities or with Aquariums. **ANY SUCH USE IS IMPROPER AND IS A MISUSE OF THE PRODUCT.**

### Where Can I Get More Information?

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**The Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.**

**Cet appareil numérique de la class A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.**

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### Hours of Operation:

Monday – Friday, 8:00am – 5:00pm (CST)

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